

CHILTON'S

MOTOR AGE

October, 1958



OVERHAUL...
and how!

Also in this Issue: Motor Age Auto Show—begins on page 45; Automotive Service League's Shop of the Month—page 37; Cooling System Service—page 72

2 reasons why engines get more power protection from Perfect Circle

PERFECT CIRCLE 2-in-1 CHROME SETS

solve problem of excessive oil consumption past pistons!

2-in-1 Chrome sets provide the finest piston rings obtainable! Top rings and oil rings are plated with thick, solid chrome. Entire area of ring travel gets complete wear protection, *more than doubling* life of cylinders, rings, pistons. No tedious break-in is necessary, rings are pre-seated at factory.

INSURE CUSTOMER SATISFACTION — install 2-in-1 Chrome sets for thousands of extra miles of power protection and positive oil control!

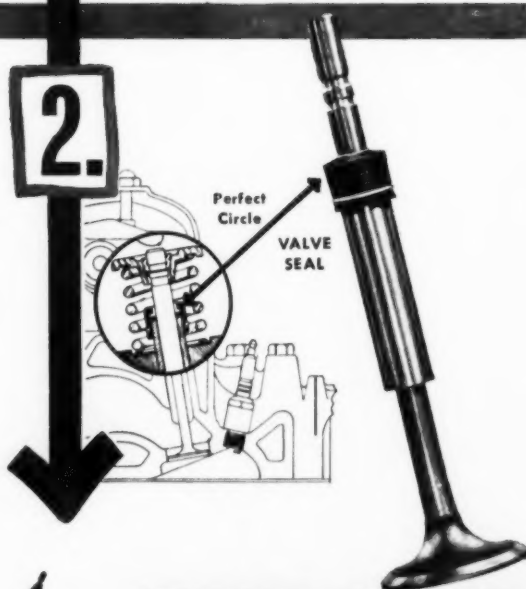


PERFECT CIRCLE VALVE SEALS

solve problem of excessive oil consumption past valves!

New rings and restored valve efficiency produce higher compression pressures...and higher deceleration vacuum. Increased vacuum sucks oil through loose or worn valve guides. Stop this oil loss with *new* Perfect Circle Valve Seals!

INSURE CUSTOMER SATISFACTION — Install Perfect Circle Valve Seals on all re-ring jobs and all overhauls.



PERFECT

PISTON RINGS AND



CIRCLE

POWER SERVICE PRODUCTS

Hagerstown, Indiana

Don Mills, Ontario, Canada

ANOTHER **BLUE STREAK**
SECRET SERVICE TIP FOR YOU

SHERLOCK McKANICK and MIKE

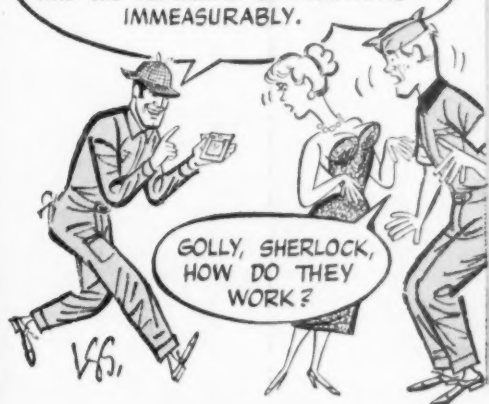
"...the CASE of the
HOT FINGERS"

MIKE!
OUR ENGAGEMENT'S
OFF! I'VE NEVER
HEARD SUCH
LANGUAGE!

GOSH, SALLY, I'M SORRY! YOU
WALKED IN JUST AS I BURNED MY
FINGER WITH THAT BLANKETY-BLANK
SOLDERING IRON!

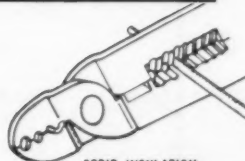


SALLY, YOUR ENGAGEMENT
IS ON AGAIN. THESE "STANDARD"
SOLDERLESS TERMINALS SHOULD
IMPROVE MIKE'S LANGUAGE —
AND HIS TERMINAL CONNECTIONS—
IMMEASURABLY.



GOLLY, SHERLOCK,
HOW DO THEY
WORK?

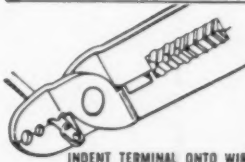
60 SECONDS LATER



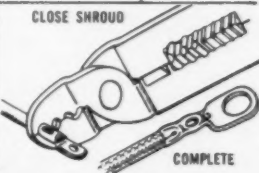
STRIP INSULATION



INSERT CABLE



INDENT TERMINAL ONTO WIRE

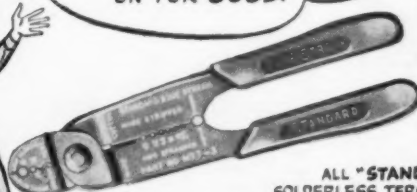


CLOSE SHROUD

COMPLETE

"HERE'S A PERFECT CONNECTION—WIRE STRIPPED,
TERMINAL APPLIED AND CRIMPED IN JUST ONE
MINUTE. THE TERMINAL CONNECTION IS STRONGER
THAN THE WIRE ITSELF."

THIS HANDY "STANDARD"
3-IN-ONE TOOL CUTS THE
WIRE, STRIPS IT, AND CRIMPS
THE TERMINAL SO IT STAYS
ON FOR GOOD!



ALL "STANDARD"
SOLDERLESS TERMINALS
ARE THE SUPERIOR SEAMLESS
ONE-PIECE "AIRCRAFT TYPE" FOUND
BEST FOR AUTOMOTIVE USE. (PAT. #2371469)

DEALERS, YOUR JOBBER
HAS PLASTIC BOX STORAGE
ASSORTMENT (WITH TOOL)
AND HANDY ONE-AT-A-TIME
DISPENSER PAKS.



OR

WRITE:
STANDARD MOTOR PRODUCTS, INC.
37-18 NORTHERN BLVD.
LONG ISLAND CITY, I, N.Y.
ASK FOR CAT. BC-56

I GO FOR
A MAN WHO
USES
"STANDARD"
SOLDERLESS
TERMINALS!



BETTER
CONNECTIONS
—AND I'LL
NEVER SOLDER
AGAIN.

NO WONDER
42,000 DEALERS
SAY "BLUE STREAK
IS BETTER FOR
YOUR BUSINESS!"

WORLD'S FOREMOST
HEAVY-DUTY
IGNITION LINE

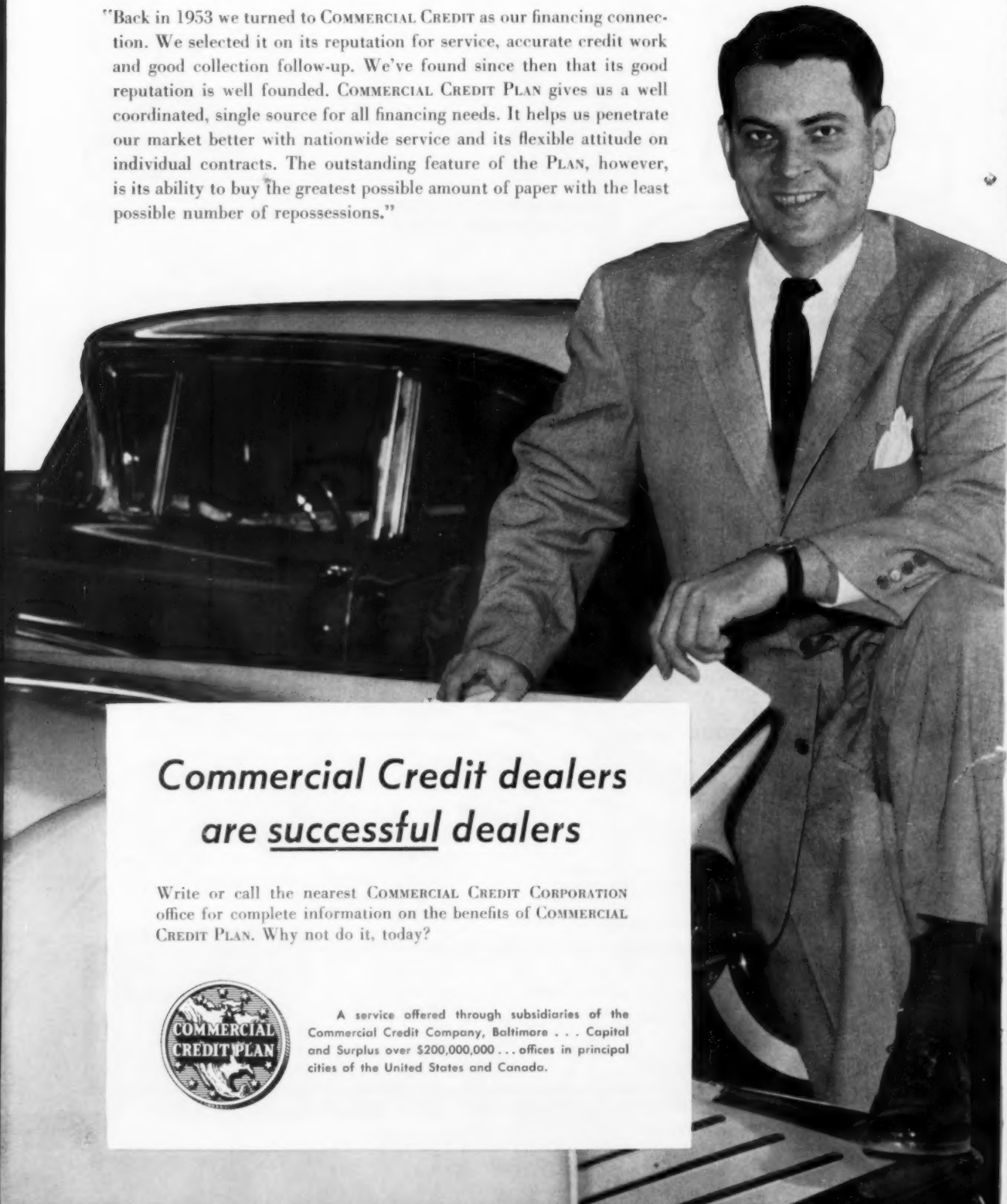


CONTACT POINTS • REGULATORS • SWITCHES • COILS • CONDENSERS • WIRE and CABLE

"...its good reputation is well founded"

says C. K. CORDRAY, President, Ogden Ford Sales, Ogden, Utah

"Back in 1953 we turned to COMMERCIAL CREDIT as our financing connection. We selected it on its reputation for service, accurate credit work and good collection follow-up. We've found since then that its good reputation is well founded. COMMERCIAL CREDIT PLAN gives us a well coordinated, single source for all financing needs. It helps us penetrate our market better with nationwide service and its flexible attitude on individual contracts. The outstanding feature of the PLAN, however, is its ability to buy the greatest possible amount of paper with the least possible number of repossessions."



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Write or call the nearest COMMERCIAL CREDIT CORPORATION office for complete information on the benefits of COMMERCIAL CREDIT PLAN. Why not do it, today?



A service offered through subsidiaries of the Commercial Credit Company, Baltimore . . . Capital and Surplus over \$200,000,000 . . . offices in principal cities of the United States and Canada.

McQUAY-NORRIS makes the
most *Power-Packed* rings
in the world



...and the Famous
"400" Oil Ring
is in every set...

When the problem
is oil consumption, the
Famous "400"
Oil Ring will
outperform
any other type oil
ring made today.

The Duo Oil-Compression
Ring with Chrome Armored
Steel Rail

The Famous
"400" Oil Ring
with Chrome Armored Rails

The Famous Torsion-Tight
Aviation Fire Ring

McQUAY-NORRIS
CHROME **LEAK-PROOF**
PISTON RINGS

Distributed by the finest wholesalers in the industry
McQUAY-NORRIS MFG. CO., ST. LOUIS • TORONTO

REPAIR FOR YOUR B&D TOOLS



For genuine Black & Decker repairs check Yellow Pages under "Tools-Electric" for address of nearby Black & Decker

FACTORY SERVICE BRANCH

Free tool inspection when requested • Genuine B&D parts used • Factory-trained technicians handle all work • Standard B&D Guarantee at completion of recommended repairs • Fast service at reasonable cost.

Or write for address of nearest of 48 branches to:
THE BLACK & DECKER MFG. CO., Dept. 55210, Towson 4, Md.



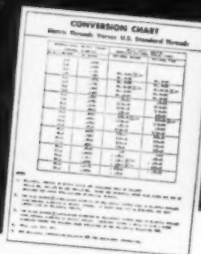
Black & Decker®

QUALITY ELECTRIC TOOLS

Circle 387 On Inquiry Card, page 69

FREE CHART

Shows How To
Convert Foreign-
Car Thread Sizes
To U.S. Standards



Find out how easy it is to convert foreign threads to U.S. Standard sizes by using Heli-Coil® stainless steel Screw-THREAD Inserts.

No more problems with metric or Whitworth sizes. Heli-Coil Inserts are the common denominator to convert them easily, economically and permanently to U.S. Standards. This new chart developed by Heli-Coil shows how. Mail the coupon, today!



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A DIVISION OF TOPP INDUSTRIES, INC.

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OCTOBER, 1958

Vol. 77, No. 11

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TUNG-SOL® FLASHTESTER



FEATURES OF
THE HANDIEST AUTO SERVICE
FLASHLIGHT EVER DEVELOPED

- lifetime magnet
- bulb & fuse tester
- ring hanger
- non-breakable lens
- no-roll cushioned head
- cushioned end cap
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FREE

WITH

\$1.99
VALUE

ONE CASE (12 lamps) of 5400-S or 5040-S
VISION-AID HEADLAMPS or . . .
TWO CASES (16 lamps) of 4001 or 4002
DUAL VISION-AID HEADLAMPS
(16 of one type, or 8 each of both types)
AT REGULAR PRICES!

Limited Time Only—Call Your Tung-Sol Distributor Today



LAMP DIVISION  **TUNG-SOL ELECTRIC INC.** NEWARK 4, NEW JERSEY



MOTOR AGE MEMO

Company's Coming—Let's Get Ready for '59

REMEMBER how Mom used to go all out when she learned that "Company was coming." Out came the duster, the mop and scrub brush.

It was work but it was fun. And, when "company" arrived the place was spic and span as your folks put their best foot forward.

In a way that's just what's happening to business today. With the recession softening, with brand spanking new car models, with

more cars and trucks on the road—it sure seems like "company's coming."

Roll out the red carpet. Turn up the lights. Toss out the debris and worry of the past twelve months and start thinking of a new page in your journal that may well figure to be a profitable one.

This month the majority of the 1959 new cars make their appearance. We've lined them up for you in the "Motor Age Auto Show" which starts on page 45.

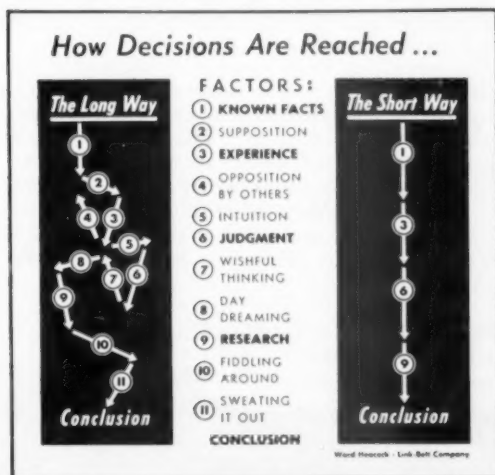
A Thirty Per Cent Increase

L. L. "Tex" Colbert, Chrysler president, has taken a confident outlook in anticipating a "substantial recovery" for the automobile industry in 1959.

"We are . . . planning for a year in which between 5½ and 6 million passenger cars will be sold at retail in the United States. This compares with estimated retail sales of about 4,600,000 cars in 1958," the Chrysler chief said. "To put it another way, we think there is a possibility of an increase of close to 30 percent over the 1958 passenger-car market. Of the anticipated total of passenger-car sales in 1959, we believe about 400,000 will be sales of imported cars."

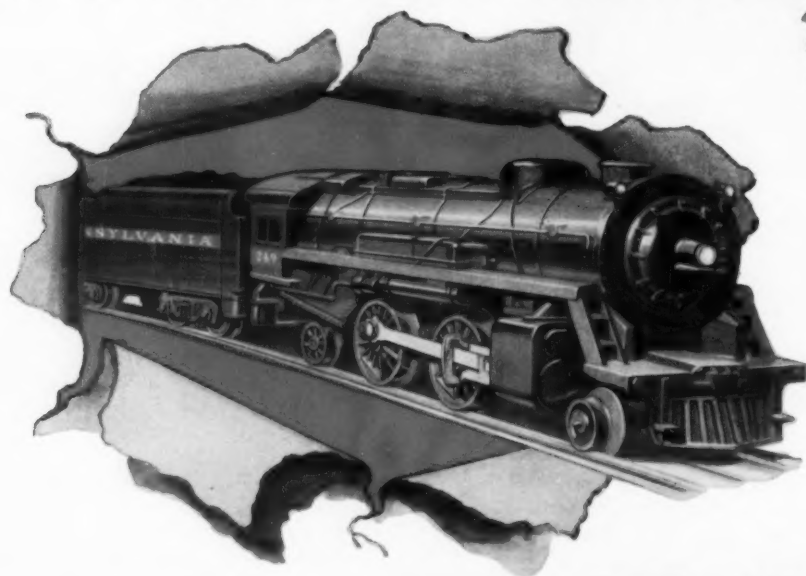
Faithfully yours,

Frank P. Tiger



We are indebted to Ward Heacock of Link-Belt Company for the above illustration showing the long and short way to reach a decision. Look it over and study it. Points one, three, six and nine will help you in your future decisions.

**wix® BREAKS THROUGH
WITH AN EXCITING FALL PROGRAM FOR** *you!*



**GET THIS GREAT SET OF FAMOUS LIONEL TRAINS
FOR YOUR FAVORITE YOUNGSTER!**

Rx **wix®**
*Prescription
Filtration*



WIX passes up the china, glassware and dipped silver premiums for the liveliest gift of all—LIONEL Trains. With this LIONEL set, your only problem is picking the youngsters you want to see overjoyed at Christmas or at birthday time. Of course, there'll be grown-ups too, who'll want to lend a hand as engineer!

Qualifying to get the special LIONEL train set is supremely simple. All you do is give your jobber a firm order for 72 WIX Oil or Air Filter Cartridges to be delivered as you need them this fall. Your jobber will then give you a certificate. You mail the certificate to WIX and the complete set will be delivered direct for only \$12.95 plus postage and C.O.D. charges, an actual saving of \$27.65. There are no hidden gimmicks in this outstanding offer. You simply sell 72 WIX Filter Cartridges this fall and the deal is yours. Call your jobber now and get full particulars because this offer ends November 10, 1958.

WIX CORPORATION • GASTONIA, N. C.
In Canada: Wix Corporation Ltd., Toronto

HERE'S WHAT YOU GET...

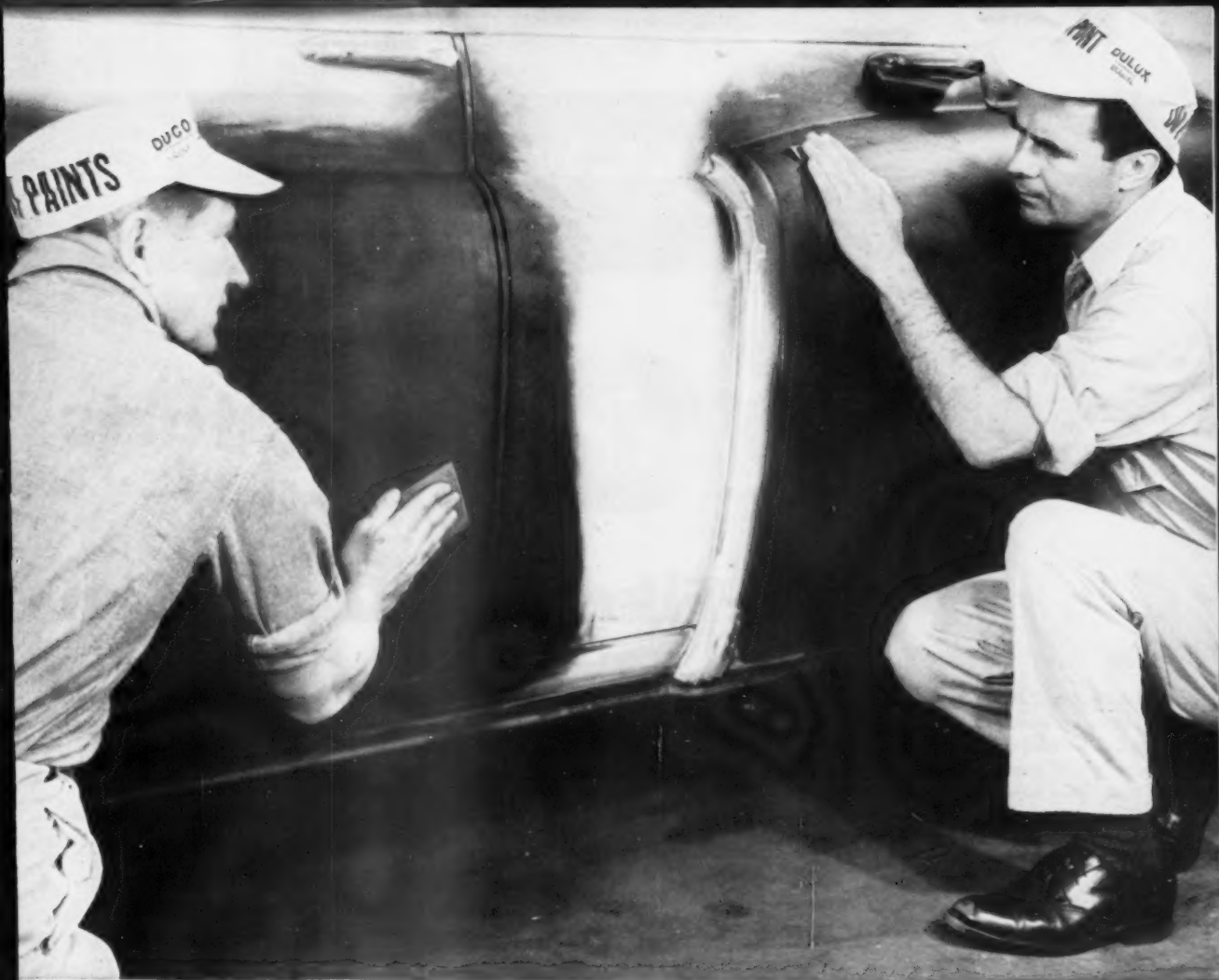
Lionel's famous 2-4-2 Steam Locomotive and Tender, Box Car, Flat Car with Patrol Truck, Gondola with Cansisters, Caboose, Automatic Uncoupling Control, 6 sections straight Track, 8 sections curved Track, 45-watt Transformer, Lock-On, Lubricant and Instruction Sheet.

Only
\$12⁹⁵



**TOTAL
RETAIL PRICE
\$40.60**

Plus postage and C.O.D. charges



Primer-Surfacer sanding race shows how to get jobs out faster with less labor!

To save costly shop time, test the sanding speed of your primer-surfacer. You'll get fast, easy sanding with no tearing or pulling when you use Du Pont Hi-Speed Lacquer-Type Primer-Surfacer. It actually gives the *fastest* sanding that can be obtained without sacrificing other important features. And what are these other features? Fast filling, fast drying, plus beautiful color holdout for high gloss with less rubbing. You'd save with Hi-Speed Primer-Surfacer even if it cost more. But since it reduces 2 to 1 (1 gal. gives 3 at the gun), it costs *less* than many so-called "bargain" primers. You save money with Du Pont Hi-Speed Primer-Surfacer every time!

Fast-drying
Easy-sanding
Money-saving



OTHER THINGS FOR BETTER LIVING
... THROUGH CHEMISTRY

HI-SPEED PRIMER-SURFACER

(Lacquer-Type)

DU PONT REFINISHING MATERIALS



SELLING SLANTS

MONEY-MAKING FACTS

Auto Care starts

AC's Five-Star Campaign

"Auto Care" is the basis of your replacement business . . . and this fall, AC is backing your sales efforts with strong five-star support.

First . . . a powerful, AC Advertising Campaign featuring the timely theme, "Auto Care Starts With AC!" It's being

launched right now—right in your trading area.

Second . . . your fall tie-in for increased sales—AC's big dealer window display, starring "Sparky" done in bright, dimensional plastic.

And here's more big news . . . your AC FM-43-SP "Auto Care" Package contains a really hot sales starter . . . the new, exclusive, all-plastic AC "Service Special" display to provide point-of-sale merchandising of your own individual fall "Service Specials."

Auto Care starts with... **AC**

SERVICE SPECIALS

LUBRICATION \$0.00

TUNE-UP SERVICE \$0.00

TIRES ROTATED \$0.00

BATTERY CHECK (blank)

WHEEL BEARINGS REPAKED

AUTOMATIC TRANSMISSION SERVICE

FREE

SEASONAL CHANGE-OVER

\$0.1234567890

NEW PLASTIC "SERVICE SPECIAL" SIGN

A first-class sales builder . . . this impressive sign comes complete to you with 9 popular "Service Specials", 1 blank sign for your own write-in of an additional special, plus 5 sets of price numerals. It's a permanent all-weather sign in attractive colors . . . mounts in the service area, on a window or pump island. Truly a valuable merchandiser that will give you years of service!

OF THE MONTH !
FOR DEALERS

with **AC** **SPARK PLUGS**
to Boost Your Fall Sales!



New Plastic "Sparky" Window Display ★

An outstanding traffic stopper . . . "Sparky" formed in sturdy, deep dimensional plastic, flanked by supporting paper trim carrying the "Auto Care" theme. Display is suitable for either window or wall mounting. Plastic provides for extra-long display life.



Here's All You Do . . .

Order any 48 AC Spark Plugs and pay \$8.24 for this valuable FM-43-SP Package. Included with the Package is an 8-Pac of AC Spark Plugs (Type 84TS) worth \$8.24. When you sell the 8 spark plugs, you recover \$8.24 . . . the profit from the sale of the 8-Pac pays for the Promotional Package.

AC SPARK PLUG  THE ELECTRONICS DIVISION OF GENERAL MOTORS

Chilton's MOTOR AGE, OCTOBER, 1958

Powerful "Auto Care" National Advertising Support

National Magazines . . .
Special AC "Auto Care" Campaign ads appear in September and October issues of Life and Saturday Evening Post, reminding millions of motorists that "Auto Care Starts With AC!"

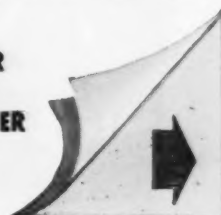


Outdoor Billboards . . . Over 5000 "Auto Care" Boards in every trading area of 25,000 people and up . . . delivering over 30 million reminder messages daily during the fall selling season.

Network Television . . .
AC announces renewed sponsorship of ZORRO, the TV hit of the year from Walt Disney Studios over ABC-TV. Millions of ZORRO viewers every week will see and hear the sales producing AC "Auto Care" story.



● **CALL YOUR
REGULAR
AC SUPPLIER
NOW !**





SELLING SLANTS

MONEY-MAKING FACTS

Auto Care starts

AC's Fall Campaign Loaded with "Sell"

10 beautiful pieces of Oneidaware to add to your set

Here it is . . . in response to thousands of requests . . . additional quality-crafted Oneidaware in the handsome matching "Profile" pattern. The deal's the same . . . Include \$7.50 with your order for any 24 AC Elements. You receive the FM-41-OF Oneidaware Package which contains 3 extra AC Elements worth \$7.50. When you sell the three AC Elements, you recover \$7.50 . . . the profit from the sale of these 3 elements pays for the Promotional Package.



- 2-Piece (Spoon and Fork) Salad Mixing Set • 4 Cocktail Forks • Cake Server
- Pierced Relish Spoon • Pierced Serving Spoon • Gravy Ladle.

Earlier AC Oneidaware Promotions are still available!

Miss the original deals? Now's your chance to get all 42 Oneidaware pieces. Ask for them by number . . . FM-31, Basic Set—four place settings: 4 knives, 4 forks, 8 teaspoons . . . FM-35, four settings of additional pieces: 4 soup spoons, 4 salad forks, 4 iced drink spoons, plus butter knife, sugar spoon, large serving spoon and fork.

OF THE MONTH !

FOR DEALERS

with **AC** **OIL FILTERS**

... Featuring Oneida Tableware!

Here's a double-action AC Oil Filter Campaign for AC dealers everywhere. First is the huge National Advertising Campaign, "Auto Care Starts With AC," aimed at car owners right in your neighborhood. Second, the campaign provides an opportunity for you to obtain 10

additional pieces of that tremendously popular Oneida Tableware.

Complete Your Set Now...The FM-41-OF "Auto Care" Package, including "Auto Care" Window Trim and Oneidaware, is available from any AC Supplier.



FULL-COLOR "TRAPPER" WINDOW TRIM

"Trapper," the famous AC Oil Filter protection symbol is eager to go to work for you this fall under the "Auto Care" banner. This valuable tie-in trim comes with every FM-41-OF Campaign Package.

Business-building national advertising support!...

National Magazines ... Full-Page AC "Auto Care" ads in Life and The Saturday Evening Post.

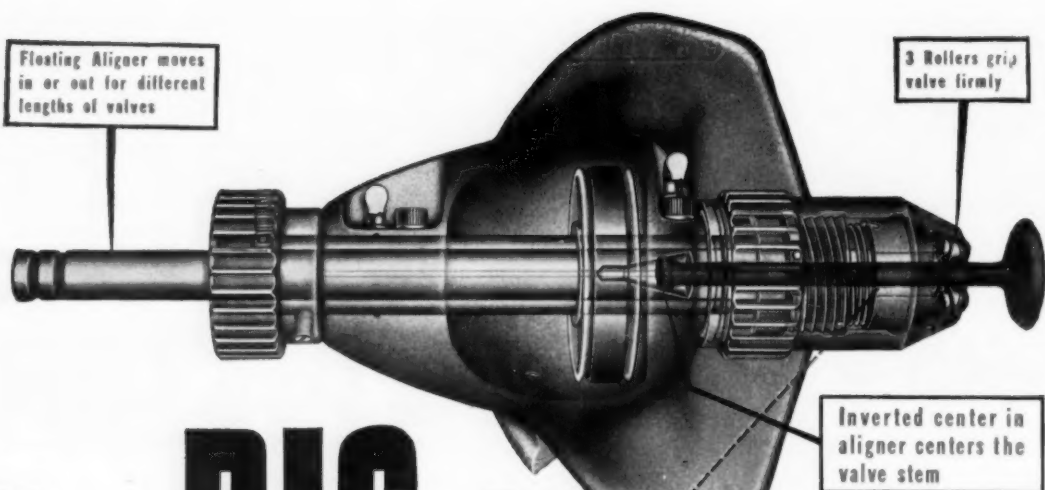


Outdoor Billboards ... over 5000 during the fall months carrying the "Auto Care" theme.



Network Television ... Action packed "Auto Care" commercials on ZORRO, Walt Disney Studios' great adventure series on ABC-TV.

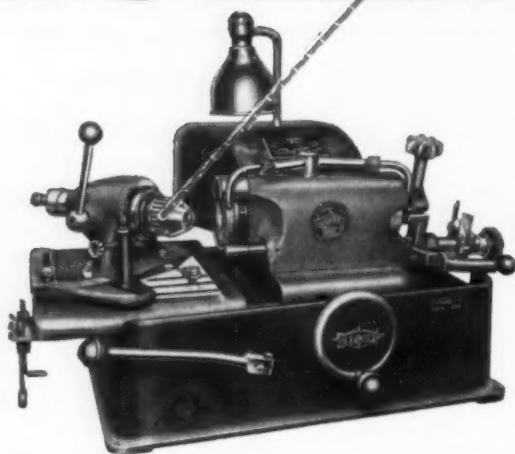
AC Spark Plug  The Electronics Division of General Motors



The **BIG** difference

is in the  *QUICK-ACTING*

ROLLER CHUCK!



IF you had to choose one feature making the largest contribution to the speed and accuracy of the Sioux Valve Face Grinding Machine it probably would be the quick-acting, easily

cleaned, roller chuck. The inverted center floating aligner holds the valve accurately in the position in which it operates in the engine while valves are ground to within .001". It's fast, easy and accurate.

But as in all fine machinery, there is precision in a multitude of details. Belts absorb vibration . . . a cast iron base provides rigidity and weight . . . way bars are precision made, hardened and ground to close limits, and wet grinding eliminates heat and distortion.

For over 25 years men who have to lay down their hard earned money have been comparing and choosing the machine they liked best. The results are that today there are more Sioux Valve Face Grinding Machines in use than all others combined. Buy Sioux and you buy the finest.



ALBERTSON & CO., INC.
 SIOUX CITY, IOWA, U.S.A.

NEW AIR IMPACT WRENCHES • NEW AIR SCREWDRIVERS • NEW "PELICAN" NUT ACCUMULATORS
 • ELECTRIC IMPACT WRENCHES • DRILLS • GRINDERS • SANDERS • POLISHERS • VALVE FACE
 GRINDING MACHINES • SCREWDRIVERS • PORTABLE SAWS • FLEXIBLE SHAFTS • ABRASIVE DISCS

SELL THEM SOMETHING BETTER

ROBERT BOSCH SPARK PLUGS

WITH THE EXCLUSIVE PYRANIT INSULATOR



Robert Bosch was the first manufacturer in the world to make spark plugs. And it has pioneered improvements ever since. Robert Bosch was the first to introduce the heat rating system now in universal use. Robert Bosch years ago made spark plugs with the extended insulator tip. Today only Robert Bosch has the Pyranit insulator which is exceptionally resistant to high temperatures, mechanical damage, electrical failure.



You'll find it more profitable to *sell them something better*. Write for full information about Robert Bosch Spark Plugs — and Robert Bosch Super Coils, Voltage Regulators, Electric Windshield Wipers, Stark-Tone Horns.

ROBERT BOSCH CORPORATION

40-25 Crescent St., Long Island City 1, N.Y.

Branch: 225 Seventh St., San Francisco 3, Cal.

*Registered U. S. Pat. Office. Robert Bosch GMBH, manufacturers of Robert Bosch products.

 <p>Standard equipment on leading European cars. The foreign car replacement market itself is tremendous.</p>	 <p>Rugged service: Many of the important international races have been won with Robert Bosch Plugs.</p>
 <p>Extra special: For hot-running 2-cycle engines on certain applications on outboards, chain saws, etc. Robert Bosch has P11S and M11S plugs — substantially different in design from conventional plugs.</p>	 <p>Full Profits! Robert Bosch Spark Plugs are competitively priced—yet free from price wars.</p>

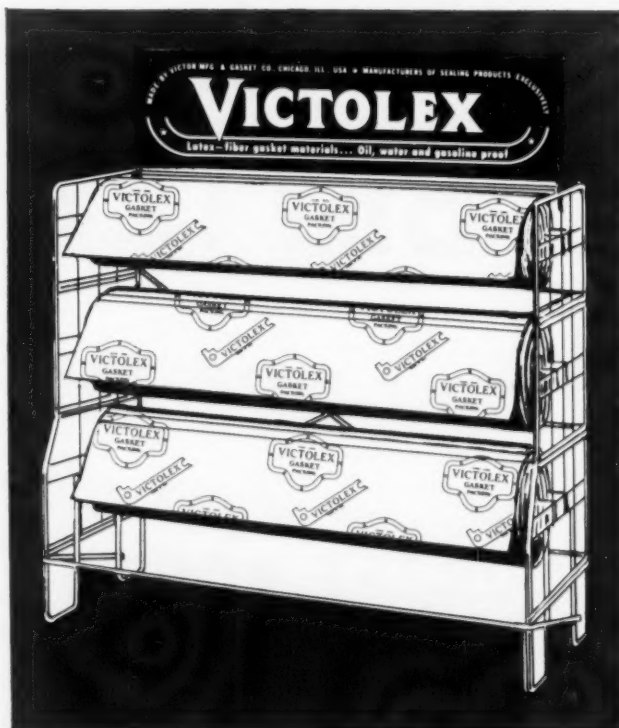
Another VICTOR "First" in Super-Sealing! Victolex Sheet Packing

NEW, improved general-purpose gasket material of cellulose fiber and rubber—replacing Victorite glue-glycerin sheet packings—at no increase in cost to you!

VICTOLEX—made by a patented process—is composed of high-grade cellulose fiber and oil-resistant synthetic rubber binder. It is stronger, tougher and more resilient than all former standards for general-purpose sheet packings. It seals better than any such gasketing you've ever used.

VICTOLEX has excellent sealing characteristics for oil, fuel, water and anti-freeze. It doesn't shrink, stretch, dry out or break down under pressure or heat up to 300° F.—nor does it corrode light metals.

VICTOLEX is easy to handle, cut and shape with ordinary shop tools to any required pattern. Yet **VICTOLEX** costs you no more than less efficient glue-glycerin packings.



**Order VICTOLEX now...
from your VICTOR Jobber**

VICTOLEX is available immediately from your Victor Jobber in rolls and sheets. Comes in three thicknesses: $\frac{1}{64}$, $\frac{1}{32}$ and $\frac{1}{16}$ in. Shown are two popular 3-roll assortments for service shops. The sturdy wire storage-service rack is supplied at no added cost with your initial assortment purchase.

3-Roll Assortment (above) 36-in.-wide rolls. Choice of any three:
 JV-90— $\frac{1}{64}$ in.—50 yd.; JV-95— $\frac{1}{32}$ in.—25 yd.;
 JV-94— $\frac{1}{64}$ in.—25 yd.; JV-92— $\frac{1}{16}$ in.—25 yd.;
 JV-91— $\frac{1}{32}$ in.—50 yd.; JV-96— $\frac{1}{16}$ in.—15 yd.

Assortment JV-10 (left) 18-in.-wide rolls. Includes one each:
 JV-11— $\frac{1}{64}$ in.—10 yd.; JV-13— $\frac{1}{16}$ in.—5 yd.;
 JV-12— $\frac{1}{32}$ in.—10 yd.;

Victor Mfg. & Gasket Co., P.O. Box 1333, Chicago 90, Ill. Canadian Plant: St. Thomas, Ont.

VICTOR

Sealing Products Exclusively

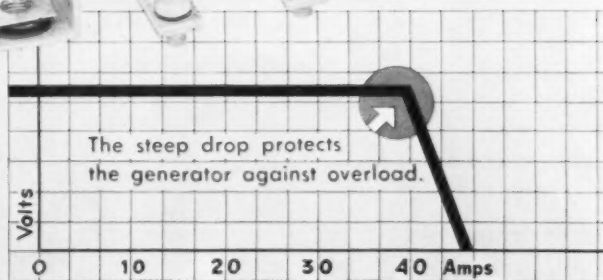
GASKETS • OIL SEALS • PACKINGS

The 100% Coverage Line . . . for Cars, Trucks, Tractors, Stationary Engines

**\$17⁹⁰ puts any dealer in
the Voltage Regulator
Replacement Business**

**Only 3 types of
ROBERT BOSCH
Voltage Regulators**

cover practically all 6 volt applications
(3 additional types for 12 volt)



The empty battery is rapidly recharged. The fully loaded battery cannot be over-charged. ROBERT BOSCH Voltage Regulators are the most dependable in the world.

3 ROBERT BOSCH Voltage Regulators are all you need to cover the 6 volt applications on practically all American cars and trucks (3 additional for 12 volt). Get your share of this profitable, big-volume replacement business, without the need for carrying big inventories. For full information and the name of your nearest ROBERT BOSCH distributor write:

ROBERT BOSCH CORPORATION

40-25 Crescent St., Long Island City 1, N. Y.

Branch: 225 Seventh St., San Francisco 3, Cal.

†Registered U.S. Pat. Office. ROBERT BOSCH GMBH, manufacturers of ROBERT BOSCH products.

A hand holds a syringe filled with dollar signs (\$\$\$\$). The syringe is tilted, and the liquid is dripping into the top of a car battery. The battery has several caps and terminals. The background is a dark, jagged shape.

A NEW WAY TO MAKE

Extra

MONEY OUT OF BATTERIES

You profit 3 ways with

Exide

WINTER-START INSURANCE



All-out Fall Promotion! Winter-Start Insurance will (1) bring in new customers during October and November . . . (2) sell recharges . . . (3) move new batteries off your rack . . . and increase the specific gravity of your cash register.

Here's how it works! You check a customer's battery—regardless of its make or age. If it's okay and looks good, *you insure it for winter*—until March 31, 1959. If the battery needs charging, you charge it and pocket the profit. *Then* it's eligible for Exide Insurance. If a charge won't take, you've got a new battery sale. Facts: 4 out of every 10 batteries you check need charging—and one needs replacing!

Suppose the insured battery dies—an unlikely occurrence because you've checked it. The car-owner looks up your name on his Exide policy and phones you. You get him started—something you would do anyway. Remember: 80% of all battery failures occur

at home. Of course you'll take along a new Exide!

You've insured your customer against *one* battery breakdown. You'll make extra money and get a new, steady customer.

65,000,000 drivers see Exide's big ads this Fall in SATURDAY EVENING POST, CORONET, FIELD & STREAM, POPULAR SCIENCE, MOTOR TREND, SPORTS CARS ILLUSTRATED and these nationwide Sunday newspaper supplements: THIS WEEK, PARADE, FAMILY WEEKLY.

These ads sell Winter-Start Insurance to car owners *near you* when they're most interested in battery performance. They'll read "Let an Exide Dealer check *your* battery. Look for the Winter-Start Insurance sign or in the Yellow Pages." So get ready and cash in on sure-fire sales!

Here's all you do! Call your Exide distributor today for your big FREE package of Exide display and promotion materials. Make *your* place Exide headquarters.

Exide means business! Phone for more details today!

WHEN IT'S AN **Exide** YOU START...MAKING MONEY

"We've grown steadily over 11 years— thanks in large part to **MoPar**"

—Clifford G. Sherman, Sherman's Servicenter (Independent Service Garage), Bridgeport, Connecticut



"We've grown from a 2-man to a 5-man operation since we started in 1947. Regular customers like Miss Rose Ducsay do a lot to explain that success. You know, people come to a man they *rely on*.



"In fact, the most satisfactory relationship I know of in this business is just this kind of customer *confidence*. And that's why I always use products I can depend on—like MoPar.



"Using MoPar has paid off in increased profits since the day MoPar and I got together. I build confidence in my repair work by being able to tell customers the plain and simple fact—they're getting guaranteed performance with MoPar.



"MoPar pays off another way, too. MoPar people go all out to give me prompt delivery, and to supply helpful merchandising aids and technical help. My customers are sold on MoPar's genuine Chrysler Corporation Parts and Accessories—and so am I!"

Sell the line that keeps your customers sold on you—MoPar



PARTS AND ACCESSORIES

MoPar Division, Chrysler Motors Corporation, Detroit 31, Michigan



With this plan dealers have doubled their brake service business

The plan is Grey-Rock's P-L-S plan—a sure-fire way to more profitable brake work. With P-L-S you *Pull* a wheel—Look at the brakes—Show the customer what's needed.

The products are Balanced Braksets and Trucksets—with the difference you can see, show, sell. Grey-Rock combines many lining types—including woven and molded—into sets specially balanced for each make and

model. You'll find this advantage only in Grey-Rock.

And the Grey-Rock P-L-S Plan includes signs, posters and many other sales helps to promote your business—to tie you in with Grey-Rock's national advertising. Grey-Rock has the plan—the products—a complete program that has doubled brake service business for many dealers coast-to-coast! Ask your jobber about it.

First 3 to finish in "Southern 500" used Grey-Rock brake lining

The NASCAR® Grand National Circuit is called the "toughest brake laboratory in the world." Top NASCAR drivers like Speedy Thompson (left), Cotton Owens (center) and Marvin Panch, who took the first three places in the '57 "Southern 500" race, are for Grey-Rock 100%.



National Association for Stock Car Auto Racing

Advertised regularly in

The Saturday Evening
POST

Ask your jobber about a Grey-Rock Brake Service Clinic. It's the best way to keep up to date on how to handle brake problems.

Only **Grey-Rock** *makes*

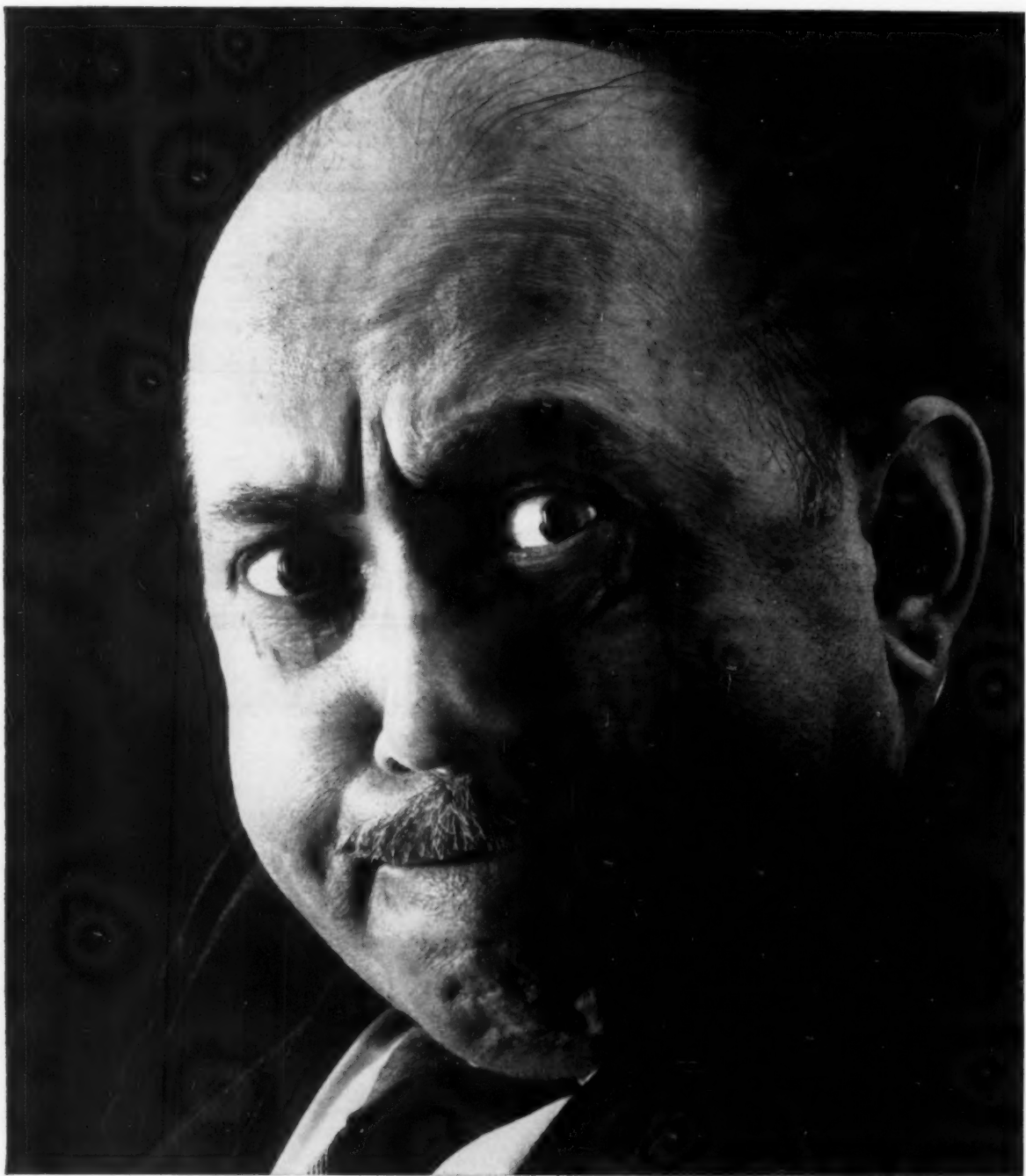
BALANCED BRAKSET LININGS

BALANCED BRAKSETS • TRUCKSETS • BRAKE BLOCKS • VEE-LOK® CLUTCH FACINGS

GREY-ROCK DIVISION of Raybestos-Manhattan, Inc., Manheim, Pa.



RAYBESTOS-MANHATTAN, INC., Brake Linings • Brake Blocks • Clutch Facings • Industrial Rubber • Mechanical Packings • Asbestos Textiles
Engineered Plastics • Sintered Metal Products • Rubber Covered Equipment • Laundry Pads and Covers • Abrasive and Diamond Wheels
Industrial Adhesives • Bowling Balls



Ready to blow his top—because of low gas mileage!

A customer of yours? Probably—because motorists everywhere are burned up about the high cost of operating their cars. However, you can cool them off fast. When a carburetor needs major repairs, don't rebuild it—replace the worn unit with a new Stromberg* Carburetor.

Installation is simple, the profit is right and your

customers are happy because they will get the improved performance which only a new Stromberg can give.

Discover this modern way to handle an *old* service problem. Ask your Stromberg Distributor for information and a "Starter Stock" today. You will be glad you did.

BENDIX PRODUCTS DIVISION SOUTH BEND, IND. *REG. U. S. PAT. OFF.

NEW STROMBERG REPLACEMENT CARBURETORS

TEXACO PT

proved the finest anti-freeze

...another top-performing Texaco product!

HERE'S WHY! Texaco PT Anti-Freeze is one more example of the fact that Texaco provides its Dealers with top-quality products.



Texaco scientists developed and tested more than a thousand formulas before they were satisfied that PT is beyond doubt the finest anti-freeze sold. They *proved* that PT is the only anti-freeze that best protects *all* the different metals and rubber in cooling systems.

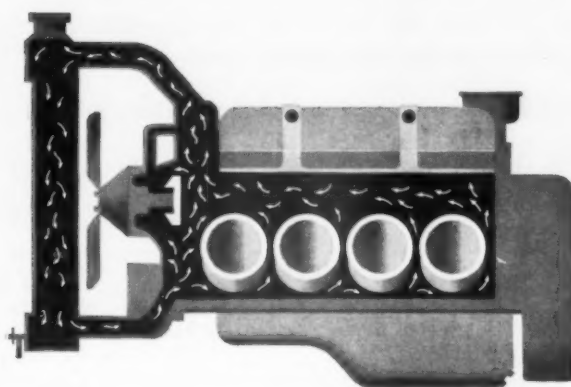
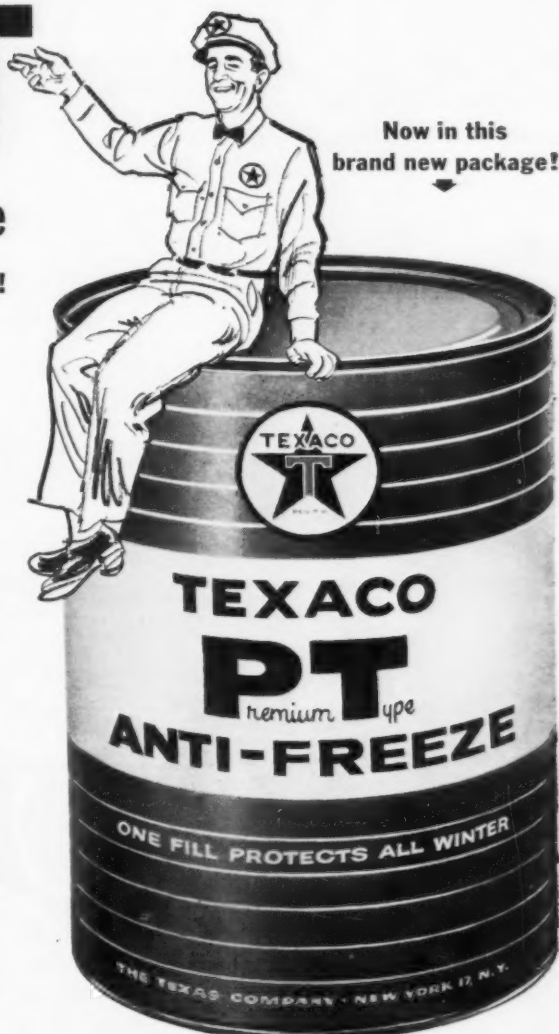


Texaco backs up its Dealers with powerful, continuous advertising and promotion of its products and Texaco Dealer services — national magazines, newspapers, TV and radio, billboards, station displays.



It all adds up to this — Texaco Dealers keep a big edge over competition, and Texaco is a good company to trade with. Ask any of the 43,000 Texaco Dealers throughout the U. S. A. and Canada.

THE TEXAS COMPANY



- ◆ SAFE-T CHECKS AGAINST FREEZE-UPS
- ◆ SAFE-T CHECKS AGAINST BOIL-AWAY
- ◆ SAFE-T CHECKS AGAINST EVAPORATION
- ◆ SAFE-T CHECKS AGAINST FOAM
- ◆ SAFE-T CHECKS AGAINST CORROSION
- ◆ SAFE-T CHECKS AGAINST HOSE-ROT
- ◆ SAFE-T CHECKS AGAINST RUST
- ◆ SAFE-T CHECKS AGAINST DEPOSITS

A SOLID FUTURE is one of the advantages of being a Texaco Distributor or Dealer. Proof: 683 of our Distributors have been with us for 20 years or more; 20,096 Texaco Dealers 10 years or more. There may be an opportunity for you. Get in touch with the nearest Texaco Division Office.

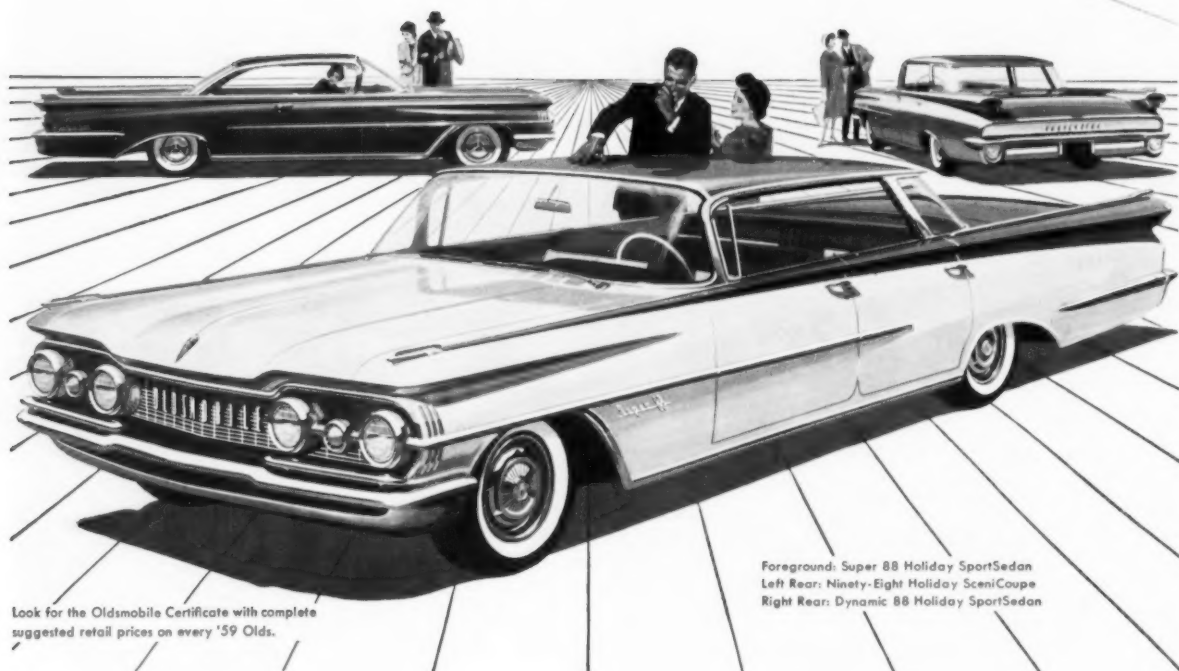
DIVISION OFFICES: Atlanta, Ga.; Boston 16, Mass.; Buffalo 5, N. Y.; Butte, Mont.; Chicago 4, Ill.; Dallas 2, Tex.; Denver 3, Colo.; Houston 2, Tex.; Indianapolis 1, Ind.; Los Angeles 5, Calif.; Minneapolis 3, Minn.; New Orleans 16, La.; New York 17, N. Y.; Norfolk 2, Va.; Seattle 1, Wash.



Introducing the "Linear Look"...

OLDSMOBILE FOR '59

So totally new...
so typically Olds!



Look for the Oldsmobile Certificate with complete suggested retail prices on every '59 Olds.

Foreground: Super 88 Holiday Sport Sedan
Left Rear: Ninety-Eight Holiday Scenic Coupe
Right Rear: Dynamic 88 Holiday Sport Sedan

Here you see the start of a new styling cycle. Here are the features that promise *continued leadership* in the medium price class for Olds dealers! Sweeping expanses of glass enhance Oldsmobile's new inner spaciousness. For in every '59 Olds there's *new roominess* . . . here, there, everywhere . . . from leg room to luggage space! New Rocket Engines, too, newly engineered for quietness, smoothness, and economy! And everywhere you look on *every* '59 Olds, you'll find new added values . . . from new Magic-Mirror Finishes to new Oldsmobile Air-Scoop Brakes on *all four wheels*. These are cars born to lead . . . abounding in solid sales advantages . . . solid reasons why it's smarter than ever to be with Olds!

OLDSMOBILE DIVISION, GENERAL MOTORS CORPORATION

The Man Who Sells OLDSmobility

is Backed by the Features with New Sales Appeal!

Guard customers against winter belt failures CHECK THE BELTS



In the winter months, more than at any other season of the year, your customers need...and appreciate...dependable protection from costly belt failures.

Cold morning starts, defrosters, heaters and greater use of lights throw a heavier load on the battery. So the performance of the belt that drives the generator to keep the battery charged is especially important.

Your customers know and respect the Gates name. The high quality and exclusive construction features of the belt help clinch sales. And your interest in saving customers' time and money will convince them they are dealing with *the right shop*.

Furthermore, there is a Gates V-Belt specifically engineered for each make and model car. They *always* fit right...save you installation time.

And remember—*there's a nice profit for you in every Gates V-Belt you install.*

Phone today for Gates V-Belt Display Rack. Supplied by your Gates Jobber, this attractive fixture puts the *right belt* for any popular make of car at your fingertips. And remember you don't lose a penny on your present stocks when you switch to Gates.

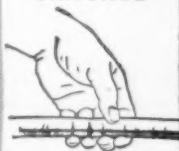
To find belt wear always turn belt over

The underside of the belt...not the top...tells the true condition of the belt.

REPLACE BELTS
LIKE THESE:



CRACKED



GREASY



GLAZED



PEELING



SPLIT



TPA-358



The Gates Rubber Company
Denver, Colorado

World's Largest Maker of V-Belts

Gates Vulco V-Belts

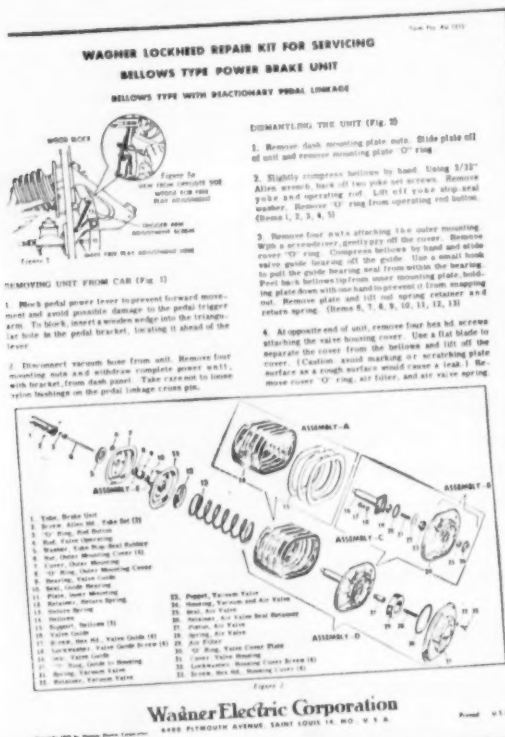
ALL FROM ONE SOURCE—Now you can obtain all of your power brake repair kits from one dependable source of supply and backed by the Wagner Lockheed reputation for quality and performance.

LOOK AT THESE FEATURES!

- New complete line covers all passenger cars and is available only from Wagner.
- Selection of kits includes single package unit, major kits, minor kits, packing kits, and poppet valve kits.
- Complete line backed by famous Wagner Lockheed reputation for quality and performance.

**EACH KIT CONTAINS A
DETAILED HOW-TO-DO-IT
INSTRUCTION SHEET!**

Each power brake repair kit includes an easy-to-follow how-to-do-it instruction sheet with all parts named and identified. In addition, it shows the steps to be taken in disassembly and assembly of all sub-units and components.



Copyright 1999 by Stephen Black, Cambridge

Wagner Electric Corporation
SAINT LOUIS 18, MO. U.S.A.

[illegible]

COMPLETE COVERAGE FOR ALL MAKES AND MODELS OF PASSENGER CARS



Wagner Lockheed ... the best

LOCKHEED BRAKE PARTS, FLUID, EXCHANGE SHOES and LINING • AIR HORNS • AIR BRAKES • TACHOGRAPHS

POWER BRAKE repair job

COMPLETE COVERAGE
FOR ALL
PASSENGER CARS!



...AND ALL FROM
ONE SOURCE...YOUR
WAGNER SUPPLIER!

GET THE *NEW* POWER BRAKE
REPAIR KIT CATALOG AU-1300.

Mail the coupon at right for your copy
of this catalog. It gives full information.

known name in brake service

ELECTRIC MOTORS • TRANSFORMERS • INDUSTRIAL BRAKES

Chilton's MOTOR AGE, OCTOBER, 1958

Wagner Electric Corporation

6498 PLYMOUTH AVENUE, ST. LOUIS 14, MO., U.S.A.
(Branches in principal cities in U.S. and in Canada)

Please send us new Power Brake Repair Kit Catalog
AU-1300

NAME

FIRM NAME

ADDRESS

CITY & STATE

WP50-6

REVOLUTIONARY NEW CUTS BODY REPAIR



**New
Black & Decker
Dustless Heavy-Duty
Belt Sander**

as little as \$7.75 a month!

BLACK & DECKER METHOD TIME RIGHT IN HALF!

USE RESINS...



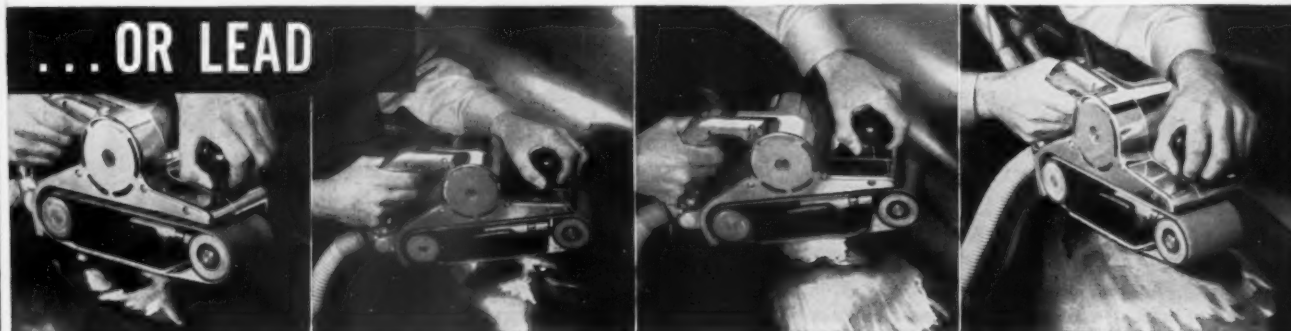
1. Remove paint with B&D Dustless Belt Sander and 16 or 24 grit opencoat abrasive until bright. Flip easy-operating lever and change to 50 grit paper.

2. Create gradual indentation from outside of area to middle and fill with resin. Remember to overfill! Dry with lamp or Butane torch. You are now ready to finish.

3. Finish sand with B&D Belt Sander. Note how dust is carried away from the work; how Sander front pulley allows you to get into tight spots!

4. On rips and tears, weld, then bump damaged area below level of surrounding metal. Apply resin, then sand with B&D Belt Sander and 50 grit paper!

...OR LEAD



1. After removing paint with B&D Belt Sander and 16 Grit Paper, cross sand in both directions (24 grit) to "mark." Handy knob gives full command of the job.

2. After dinging, repeat cross sanding to recheck. B&D's exclusive gearless transmission keeps your work free from grease or oil spots; greatly reduces noise, too!

3. Work out "chalked" irregularities. Note that B&D's flush side and front belt pulley allow you to work right to edge of the work, give you smooth, even sanding!

4. Flip lever and replace belt with 50 grit for feathering and sanding. Prime coat follows. Belt changes are easy; belts last longer with B&D's Dustless feature!

So dustless you could paint as you sand!

Whether you select the new, fast resins or lead, you'll see a big difference when you use the Black & Decker Dustless Belt Sanding method. It's so dustless, many shops even paint as they sand . . . so fast, most shops even cut job time in half! See it in your own shop. See what it means to you in extra profits. Mail coupon for free demonstration.

Leading
Distributors
Everywhere Sell



Black & Decker®

Quality Electric Tools . . . Power-Built to set the pace

MAIL TODAY FOR FREE DEMONSTRATION

THE BLACK & DECKER MFG. CO., Dept. 3110, Towson 4, Md.
(In Canada: Brockville, Ontario)

- ☐ Set up a free demonstration of the B&D Dustless Belt Sander for me!
- ☐ Send me **FREE** MODERN AUTO BODY REPAIRING BOOKLET
- Name.....Title.....
- Company.....
- Address.....
- City.....Zone.....State.....



☐ Vacuum Cleaners



☐ Polishers



☐ Impact Wrenches



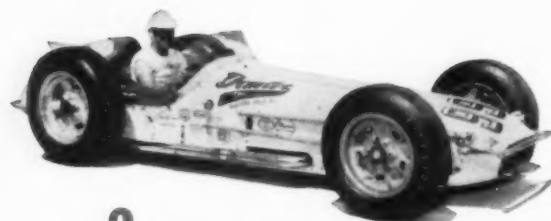
☐ Drills

Circle 395 On Inquiry Card, page 69

Again . . . Cars with RAYBESTOS Brake Linings finished 1, 2, 3 at Indianapolis!



1 Jimmy Bryan, winner of the 1958 Indianapolis 500-mile race.



2 George Amick, runner-up in the "500."



3 Johnny Boyd, third in the "500."

... and every car that completed the grueling "500" had Raybestos*

Jimmy Bryan, winner of the 1958 Indianapolis "500," George Amick, runner-up, Johnny Boyd, third, and every other driver who went the distance, called on Raybestos Brake Linings about 500 times during that brake-torturing 4-hour grind. Their brakes always responded instantly and positively.

Clearly, Raybestos is the *pick of the pros*. Give your customers the one brake lining that licked heat and wear brake problems for Indianapolis race cars. Raybestos assures swift, smooth, silent stops every time and will give you repeat business from satisfied motorists.

*Certified by the United States Auto Club

EXCITING SPECIAL OFFER!

Enjoy your own set of three 8 x 10 photos of these leading drivers and their cars. Simply send \$1.00 (to cover handling and postage) to Raybestos, with your name and address.

RELINE WITH
Raybestos
AMERICA'S BIGGEST SELLING FRICTION MATERIAL

RAYBESTOS DIVISION of Raybestos-Manhattan, Inc., Bridgeport, Conn.



RAYBESTOS-MANHATTAN, INC., Brake Linings • Brake Blocks • Brake Fluid • Clutch Facings • Industrial Rubber • Engineered Plastics • Sintered Metal Products • Rubber Covered Equipment • Asbestos Textiles • Laundry Pads and Covers • Mechanical Packings • Abrasive and Diamond Wheels • Industrial Adhesives • Bowling Balls

USE THE
Raybestos
7 POINT
BRAKE
CHECK

includes adjustment

You get paid for every car you check.
Ask your Raybestos jobber for full details today.

FLASH! Don't fail to see the new film "Brakes for 1958" at the Raybestos Brake Service Clinic

A technical color sound motion picture showing details on
• 1958 brake changes
• Effect of 14-in. wheels on brakes
• New self-adjusting brakes
• Center-plane brakes
Write to Raybestos Division of Raybestos-Manhattan, Inc., Bridgeport 2, Conn., for information on when a showing will be in your area.

SPORTS PAGE

The Strongest Lady

FOR a few hours sometime ago New York wore, like an orchid in her hair, a flower of femininity named Miss Dorcas Lehman, who is the strongest lady in the world. Miss Lehman is a red-haired saloon-keeper of York, Pennsylvania, and a Dunkard—a member of one of those Pennsylvania German sects whose members paint hex marks on the barn and wear somber black sunbonnets if they are women and spade whiskers and porkpie hats if they are men. Miss Lehman, however, is a nonconformist in costume and custom. Her clothes, lips and fingernails have a good deal of red in them, and her hobby is letting large gentlemen jump on her stomach.

It amuses the lady to form a bridge by placing her feet on one wooden bench and her head on another, whereupon a 230-pound man sits on her abdomen and swings his feet. York, which is a nest of weightlifters, has a 132-pound Hawaiian named Emerick Ishikawa, national featherweight champion. When Dorcas is making like the Triborough Bridge, she permits little Emerick to leap upon her diaphragm from a height of five or six feet.

"I feel good when I get through exercising," she explained cordially.

This durable vessel was accompanied to New York by a bald weight-lifter named Bob Hoffman, proprietor of the York Barbell Company and of a stable of muscle men. They were met by appointment, and this bureau, arriving tardily, found Miss Lehman standing in the middle of the room hoisting a hundred-pound barbell aloft again and again with what appeared to be a mere flip of the wrists. Mr. Hoffman sat by, silent with



VIEWS OF SPORT

By Red Smith

admiration. This, it was to turn out, was the only moment when that adjective could be applied to him.

Robed in Fashion

Dorcas was trig as a trip-hammer in a dress of soft gray with a bow at the throat, a beige jacket, red shoes, a rather frivolous hat of red and white, and harlequin spectacles with red plastic frames. She had diamonds on both brightly manicured hands. Turned out she was in town to buy contact lenses.

She weighs 160 pounds, is five feet six inches tall and comely in a strapping, healthy sort of way. To a timid question she replied readily that her age was thirty-two and smiled, adding: "Don't mind being asked; only sometimes they think I'm forty, and that burns me up."

Five years ago she weighed 210 pounds. She attended a weightlifting demonstration and was smitten with admiration for the physiques on display. So she bought a fifty-pound dumbbell and went home and started lifting it. It was some time later that she encountered Mr. Hoffman's appraising eye.

"She was already sensational," Mr. Hoffman said. "A little skinny in the chest at 149 pounds, but with a pair of legs you

(Continued on page 109)



Strengthen your "Economy Pitch" with Sunoco Custom-Blending!

No more complaints about engine knock or gasoline costs!

Here's a gasoline idea that's like money from home for every new car dealer.

When you sell a new car, recommend Sunoco's new Custom-Blending. This gasoline system was designed to keep car-owners happy. Sunoco Custom-Blending offers motorists six different blends of gasoline... six different octane strengths... and six different prices... to accurately fit any car you sell with the exact octane it needs.

Here's what it means to you, pure and simple:

If the car you sell calls for "regular" but comes back with knock, recommend changing to Blue Sunoco "200"—a high test gasoline higher in octane than most "regulars" — yet selling at "regular" price. If he still needs slightly more octane, the

Sunoco dealer can step him up one or two grades... without forcing him to pay the big jump to "premium" priced gasoline.

If your cars call for "premium", only Sunoco Custom-Blending can fit each and every one with the exact octane it needs. In many cases the exact blend a car owner needs will cost less than ordinary premiums.

That means these motorists can save as much as 4¢ a gallon over other premiums and still enjoy the lively stepping power and quick getaway that was built into the car.

It's a bright new idea in gasoline... a boon to the new car dealer. Study the system... see how it can help you on the showroom floor!



© 1958, SUN OIL COMPANY

MOTOR AGE

newscoop

*Ford's Training Centers
Sources of Revenue
Improved Fuel Injection
How To Save On Taxes
Novel Rear View Mirror
Survey on Small Cars
NADA's New Directors*

In the days ahead.... HERE'S WHAT TO LOOK FOR!!!

Limited Production of Broughams

CADILLAC PLANS TO BUILD only 100 completely restyled prestige model Broughams during 1959.... Will be introduced in early December.... Car will be built on Cadillac's standard 130-inch wheelbase chassis.... Will be shipped to Italy for custom-body work.

Stylewise, 1959 version incorporates several highly advanced features which will appear on Cadillac's 1960 line.... Tail fins? Yes, but they'll be much lower than those on '59 line.... Brougham will have largest windshield of any car in industry.... It wraps deeply over into roof.

More Automotive Service Training Centers

FORD DIVISION HET UP ON idea of constructing network of automotive service training centers around country.... Such as Chrysler and General Motors now operate.

Under present plans, which are just in talking stage, some 35 such units would be set up in strategic areas--one in each of company's sales districts.... Division at present has service training facilities in each of these districts.... In most cases they're either integrated with a parts depot or housed in smaller, inconspicuous buildings.

Looking For Sources of Revenue?

CAR DEALERS TAKING A CLOSER look at muffler installation work as added source of revenue.... Many dealers pushing muffler sales for first time.... They're promoting them on a "no labor charge" basis--taking a leaf from service stations.

Car dealers at present hold only 30 per cent of muffler replacement market compared with 70 per cent for independent shops, service stations and specialty shops.... Dealers also showing renewed interest in tuneup and brake work.

More Elbow Room

INTERESTING BIT OF NEWS to mechanics.... Engine compartment in Cadillac division's 1959 cars is more than a foot wider than in past.... Thus providing better accessibility.... Hood actually "overlaps" on either side so that it becomes part of front fender design.

How Many Dealers Loan Cars?

RECENT SURVEY BY DETROIT Auto Dealers Assn. shows that 81 per cent of dealers in area loan cars to customers.... Only 14 per cent of them charge customers for loaned car.... Fee ranges from \$1.50 to \$5 a day.... Only few charge on mileage basis.

Other data revealed in study: 43 per cent of dealers loaning cars furnish insurance coverage.... A few charge customer a fee to help cover cost of insurance.... 41 per cent make customer agree to pay deductible amount of insurance.... 29 per cent make customer sign an assumption of liability form.

Fuel Injection Being Improved

FUEL INJECTION IS NOT DEAD.... Will come back strongly in 1960.... Several car companies readying improved versions for introduction on 1960 models.... Chrysler will switch from Bendix electronic unit offered initially to a new simplified mechanical system.... It reportedly will be priced under present system.... Chevrolet will be only car company offering fuel injection in '59.

NADA's Views On Territory Security

PRESENT NADA MOVES FORESHOW more efforts next year to get a law allowing territory security.... NADA is asking members for their views on protected territory.... A number of NADA directors, other officers have come out for it.

Also on the association's legislative list for 1959 is action on the auto excise tax.... Look for a drive to repeal or lower it.

Postal Rates May Go Up Again!

PRESSURE WILL BE HEAVY ON CONGRESS next year to hoist rate on first-class mail again.... New charge of 4¢ per ounce fails to erase Post Office Dept. deficit.... Eisenhower Administration will aim for a 5¢ rate in 1959.

Retailers again will seek more realistic parcel post sizes, weights.... But Post Office Dept. may have higher parcel post rates in effect by next year.

How To Save On Taxes

YOU CAN SAVE TAXES ON THE AMOUNT your city assesses you for public parking areas.... Internal Revenue Service decides businessmen can deduct the assessed sums from taxable income.... If a reasonable business investment is proved.

Until now, these special assessments were not deductible.... Though assessments for parking areas have become widespread recently.

Dealers Praised By Safety Group

DEALERS LET HIGH SCHOOLS use 8,676 cars free during the 1957-58 school year.... This was more than two-thirds of cars in school driver training programs, Inter-Industry Highway Safety Committee reports.

Committee praises dealers for providing cars.... Support by dealers underscores their interest in traffic safety, says the safety group.

Novel Rear-View Mirror To Be Offered

NOVEL REAR-VIEW MIRROR will be offered by one car company as optional on its '59 model.... Mirror has photo-electric cells.... Unit automatically flips from normal to extreme glare driving position when struck by headlights of cars approaching from rear.

Auto Scrappage Failed To Continue Upward Trend

AUTOMOBILE SCRAPPAGE FAILED TO continue on the upward trend started in '56.... In 1957, total number of vehicles (cars, trucks and buses) on the road climbed to a record high.... However, number of passenger cars taken off road that year decreased.... Means more owners kept their old cars running longer.

According to R. L. Polk & Co., 4,939,461 vehicles hit junk heap in 1957.... Compared with 4,909,016 in previous year.... Included were 4,309,153 passenger cars.... In preceding year, there were 4,312,759 passenger cars put out of commission.... Marked fifth straight year in which total vehicle scrappage rose above 4 million figure.

Taxes May Go Up On Gasoline

HIGHER GASOLINE TAXES are threatened.... Congress may be urged to boost them to take up slack in federal highway trust fund.... Fund has money now.... But by mid-1960 it may be short by \$1 billion.

Eisenhower Administration is ready to resist idea of using general tax revenues to keep fund solvent.... Instead, Administration may ask increase of 2¢ per gallon.

More Service Repair Work

DEMAND FOR AUTO REPAIRS will grow at a fast rate.... As total passenger car units mount faster than truck, bus totals.... Both in the U. S. and worldwide.

Commerce Dept. adds up the gain from Jan. 1, 1957, to Jan. 1, 1958.... Registrations of cars were up 5.3 million to an 82.6 million total, worldwide.... Trucks increased by 1.3 million.... Buses by 71,000.

New Fiber Labeling Law Unclear

CAR BUILDERS MAY HAVE TO ASK government whether new fiber labeling law applies to fabrics in cars.... Government has not made clear if law affects upholstery and seat cover materials.

Law requires fiber percentages in blended textiles to be shown.... Automakers have no worry about quality of fabrics they use.... But labeling all upholstery, seat covers would be a burden.

Tax-Cut Plan For Next Year

TWO HOUSE MEMBERS ARE READY with tax-cut plan for the new Congress. ... Though any reductions next year will be hard to get. Rep. Sadlak, R., Conn., and Rep. Herlong, D., Fla., would bring corporate tax rate down gradually from current 52 to 42 per cent.... Top personal income rate also would fall to 42 per cent... Businessmen cheered a similar plan this year.

Survey Made On Small Cars

SMALL EUROPEAN CARS MAY BE SLUNG too low to benefit the U. S. driver Bureau of Public Roads, after brief study, reasons this way: Small cars with low seats prevent driver from seeing far ahead.... He will linger behind the leading car, be cautious in passing.... This could cause small car to take as much highway space as standard American auto.

New Directors For NADA

NEW DIRECTORS FOR MICHIGAN, Missouri, Indiana, join NADA board in December.... They are Arthur E. Summerfield, Jr., Flint, Mich.; James M. Allton, Columbia, Mo.; Elson G. Sims, Vincennes, Ind. Mr. Summerfield, son of the U. S. Postmaster General, is a Chevrolet dealer.... Mr. Allton and Mr. Sims are Ford dealers.

Service Work Profitable To Dealers

IMPORTANCE OF SERVICE WORK during slack new-car sales periods is pointed up by one of car companies.... In recent survey, company discovered that every one of its top dealers had profits running ahead of last year.... All dealers told same story.... Concentration on service department and used cars were main factors in increased profits picture.

Rules On Highway Advertising

FINAL FEDERAL RULES ON ADVERTISING near new interstate highway routes will permit at least one sign on your premises.... If your business house is within 660 feet of right-of-way.... On-premise rule won't matter if you're farther away.

Bureau of Public Roads gathered comments on proposed ad rules until late September.... BPR may publish final rules soon.

Outlook For Auto Repair Field

MORE MOTORISTS THIS YEAR than last are driving older cars. Federal Reserve Board says 54 per cent of owner-driven cars early in 1958 were at least five years old.... In 1957, 51 per cent were in five-year-and-up bracket.... Cars reaching this age should be due for frequent mechanical work.

Auto Glass Dealers' Hearing May Resume

PUBLIC HEARINGS ON INDEPENDENT auto glass dealers' woes may resume later this year.... Senate Small Business subcommittee would call big glass manufacturers, some auto companies, government spokesmen.

Senate group heard testimony during summer that dealers are injured by dual distribution.... Where manufacturers of glass compete at resale level with their customers.

Small Companies Get Tax Aid

TAX AID FOR SMALL COMPANIES is made possible by a new law.... Firms buying equipment or fixtures get a special writeoff of 20 per cent of cost in first year.... Law will allow estate taxes on small firms to be paid over 10-year span.

mister

jobber executive

MOTOR AGE: JOBBER EXECUTIVE EDITION

AEA Tune-up Charts for '58

NEW SERIES OF 1958 TUNE-UP CHARTS issued by Automotive Electric Assn. ...Contains latest engineering changes and specifications on '58 passenger cars.

AEA Tune-Up System includes individual charts for each particular make and model of passenger car....Charts contain exact factory specifications and latest engineering changes as well as standards of adjustment which are essential for proper engine tune-up work.

Federal Taxes On Battery Sales

STORAGE BATTERY REBUILDERS will have to pay federal excise taxes on some battery sales....New Revenue Ruling 58-444 says so....If a rebuilder replaces one or more cells....Or replaces worn plates....Or completely assembles batteries from salvaged parts....That's manufacturing, and sales are taxable....But just replacement of separators or casings is not a taxable job.

AAR To Hold Silver Jubilee

AUTOMOTIVE AFFILIATED Representatives is celebrating its 25th anniversary....Will hold a Silver Jubilee Member-Factory-Jobber Breakfast Meeting in Chicago on February 17th, 1959....This is the day immediately preceding opening day of 1959 International Automotive Service Industries Show.

Motion Picture On Wholesaling

A 16 mm FILM ENTITLED, "The Devil To Pay" will satirize "unnecessary middleman attitude" often aimed at wholesaling in general....It will show what would happen if the wholesaler—keystone in the modern distribution system—were eliminated....

Film is one project that the National Association of Wholesalers has undertaken in its program to 'Speak Up for Wholesaling!'.

NSPA Issues Code Of Ethics

A TWELVE-POINT CODE OF ETHICS has been drawn up by NSPA Automotive Warehouse Distributor's Division....Purpose: Outlining its relationship to Assn. as a whole and responsibilities of members and its overall service function to entire independent automotive service industry.

Code was approved by NSPA....Executives are urged not only to endorse Code, but to specify its continuous use as a standard performance pattern by all of their respective representatives.

Small Business Investment Companies

FIRST NEW SMALL BUSINESS investment companies probably will have money to lend early in 1959....But you can expect their interest rates to be steep....Rates to borrowers may be 6½ per cent, and up.

Small Business Administration has charge of this investment company program....SBA is likely to demand 5 per cent interest on funds put into new companies.

Operation

J O B B E R

Tips on Point-of-Sale Advertising

THERE are numerous ways for the wholesaler to promote his business through well planned advertising programs. Many use direct mail campaigns with marked success. Others depend on newspaper advertising. This they use to tie in seasonal products with special sales drives.

Still others place great emphasis, and rightly so, on dealer meetings and clinics. Aims here are to attract, inform and sell customers and prospects. Often overlooked and many times falling in the "hit or miss" category is Point-of-Sale Advertising.

It is just as important to organize and execute a good Point-of-Sale Advertising Program as any other kind of advertising that wholesalers use to create action, aid in making sales. The usual stumbling block is lack of organization. Program is not on a monthly, quarterly or semi-annual basis. Or program is not built around key lines.

All leading manufacturers supply good assortments of attractive display pieces. These include posters, signs, clocks, streamers, banners, pennants, literature and other material.

When this material is properly used, it can be counted on to produce outstanding results. In fact, the average wholesaler's establishment would look drab and uninviting to customers and

prospects without them.

Broadly speaking, all advertising in an establishment and even the merchandise itself can be classified as Point-of-Sale advertising. This kind of advertising includes company name signs. Also windows and floor areas where displays are used.

Next, consider the Point-of-Sale advertising material regularly supplied by the manufacturers of your twenty-five to thirty leading lines. Plan the use of the material in windows, floor areas, over shelves, on walls on a scheduled basis. Tie in with special drives. Be alert to seasons when certain classes of merchandise sell faster.

This job is not as formidable as it appears. The best method is to use merchandising calendars. These are sometimes furnished by trade associations or manufacturers. Or you can make your own. The main objective is to make your plans for the constant use of Point-of-Sale material through the year. Then, set the plan down on paper. Immediately contact suppliers for special material.

One Man in Charge

It is also a good idea, once a Point-of-Sale advertising program is ready, to make one single person responsible for its execution. The better the original plan, the easier the follow-

through. So plan carefully every aspect of your program.

Customers without knowing it resent the same old appearance with the same old display material in the same old places. Subconsciously they gravitate to those stores that are bright, clean with good stocks of products well displayed. Your customers do their home and household shopping in modern stores. In supermarkets there is a premium placed on good selections of merchandise, interesting displays and products that are expertly advertised at the point-of-sale!

What Makes a Sale?

Sales are made in an infinite variety of ways. First, a wholesaler must stock the best known brands of the highest possible quality. Second, he must have good salesmen who know their lines; are capable of doing a real selling job. Third, the wholesaler must provide good service once an order is written. Fourth, he must let all automotive retail outlets know about the products and services he offers. Fifth, he must advertise his business. Every day of the year. Not on a skip and hit basis. Point-of-Sale advertising should not be forgotten. It is just one of the really important ingredients that help make sales in greater volume each year.

*signs
of the
times...*



The Joint Operating Committee of the International Automotive Service Industries Show (Feb. 18-21) has announced selection of Miss Eve Strasborg to be Queen of the 1959 Show. Assisting Miss Strasborg as Princess will be Miss Holly Ray of Chicago.



Scene showing one section of display booths and part of the crowd attending the August automotive show put on by Parts, Inc. of Memphis. Prior to Jan. 1, 1958, Parts, Inc. was known as Ozburn-Abston & Co.

Turner Urges Auto Education

"The future of the automotive parts rebuilding industry is at stake if enough qualified and skilled automotive mechanics are not trained to install and adjust rebuilt parts and units." Thus warned Mel Turner, garage owner from Chicago recently.

Turner was speaking before the annual convention of the Automotive Parts Rebuilders Association, Inc. Place was the Conrad Hilton Hotel in Chicago.

Turner went on to say that "as Rebuilders, you should be particularly interested in all phases of automotive training programs. Lack of adequate training could easily reflect unfavorably on the rebuilt units you furnish to wholesalers."

Turner added: "Although, you have done a workmanlike job with quality material, you may have merchandise returned. Because of the lack of knowledge and skill of an installer. A skilled installer would ordinarily make a minor adjustment; in less time than it would take to remove the unit and return it to the jobber."

Mr. Turner is director of the automotive instruction program of the National Standard Parts Association.

Adding New Bldg.

Groundbreaking ceremonies for the new Micro-Lube Sales home office and factory were held September 15. The new construction will cost \$80,000 and is expected to be completed in 90 days.

The 12,800 square foot structure will be one-story, steel and brick. Three thousand of these square feet will be devoted to office space. The remainder for manufacturing, warehousing.



Picture taken during recent Ammco Tools, Inc. mid-year regional managers meeting in Illinois. One feature of meeting was a joint session, including Fred G. Wacker, Jr., president; Marty Bazner, Sr., vice president—Sales; Dick Stevenson, advertising and service director; all six regional managers; and the staff of Engineering and Research of Ammco.



Learning by doing was the keynote of a five day course recently held at the Ferris Institute in Big Rapids, Mich. Course was conducted for John Bean automotive representatives. Purpose was to acquaint them with the new John Bean frame straighteners and body press.



John Watson, president of Hein-Werner Corp recently announced the opening of new plant facilities in Ajax, Ontario. Plant is shown above.

Meetings Held On West Coast

A series of west coast meetings are being held by United Motors Service. Purpose: to acquaint automotive parts wholesalers with the product and merchandising features of Delco Dry Charge batteries. Meetings began early September; expected to conclude the end of October.

Participating in the meetings are west coast regional and zone managers of the General Motors division. Also Central Office executives from Detroit. This latter group is headed by Roland S. Withers, general manager, and Thos. F. Plant, general sales manager. Jeff Gray is western regional manager for United Motors. His headquarters are in Los Angeles.

Top Lines Survey

A complete analysis of the automotive wholesaler's top-volume lines has been undertaken by the Motor and Equipment Wholesalers Association. Results of the survey notes general manager B. W. Ruark will help MEWA members in purchasing and sales plans.

Questionnaire was sent in late August to each of MEWA's more than 1500 members. The study provides for separate breakdowns in five annual volume categories. 1) up to \$250,000; 2) \$250,000 to \$500,000; 3) \$500,000 to \$750,000; 4) \$750,000 to \$1,000,000; and 5) over one million dollars.

Opens Warehouse

Marquette Manufacturing Co. (Minneapolis) has announced the opening of a new warehouse in Chicago. Vernon Holmes is the manager.

Speakers at TBA Group's Meeting

The Oil Industry T. B. A. Group has released the names of principal speakers at the 1958 annual meeting in St. Louis. Dates are December 1st and 2nd. Place is the Chase Hotel.

Principal speakers include Harry W. Ferguson, vice president, Humble Oil Co.; Vic Holt, executive vice president, Good-year Tire Co.; L. H. Middleton, vice president and director of Engineering, The Electric Auto-Lite Co.; J. A. McCauley and Paul Francois, merchandising consultants; Rube Hedlund, secretary, Retail Tire Dealers Association; and Miss Jeanne Pierre, American Rayon Institute.

AWDA Elects

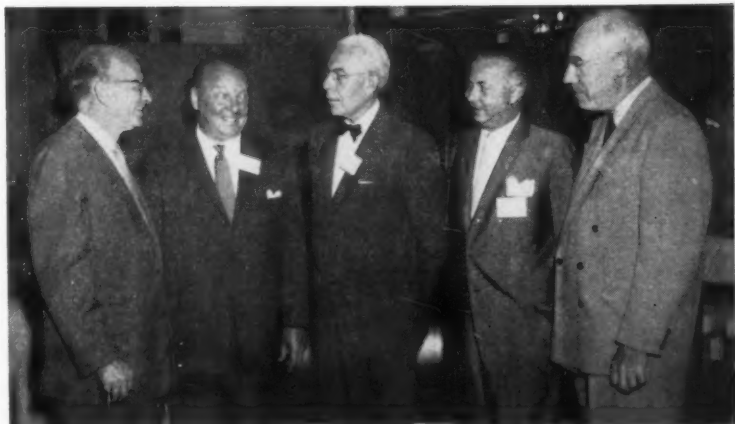
During the summer meeting of the board of governors of the Automotive Warehouse Distributors Association the following warehouse distributors and manufacturer suppliers were elected to membership in the Association:

John D. Harvey Co., Dallas, Tex.; Blackhawk Mfg. Co., Milwaukee, Wis.; Seaport Automotive Warehouse, Oakland, Calif.; Eaton Mfg. Co., Cleveland, Ohio; R. M. Hollingshead Corp., Camden, N. J.

The meeting was held August 18. Place was Estes Park, Colorado.

Opens New Center

A new research center has been opened by The Electric Storage Battery Co. of Philadelphia. Center will probe a wide range of related scientific subjects. From packaged power sources of the future to artificial organs for medical use.



Factory service heads confer with National Automobile Dealers Association officials on Chicago Exhibition plans. Left to right: Phillip B. Hopkins, director of Service Development and Training, Chrysler Corp.; Marty Bazner, vice president, Ammco Tools; Al Long, NADA director, Detroit; William Bryden, NADA director, Wisconsin; and M. E. St. Aubin, director, Service Section, General Motors Corp.



Plans for the 1959 Pacific Automotive Show are falling into shape in record-breaking manner reports Show president Robert D. Wootten. Pictured above was a summer committee meeting at Berkeley, Calif. The Show will be held in New Brooks Hall, San Francisco—March 12-15.



Shown above is the 26,000 square foot combination salesroom-showroom warehouse and parking area constructed by United Automotive Supply Co. in Detroit. Front of building is a colonnade of exposed steel.

Industry Meetings

Oct. 12-18—Oil Progress Week.
Oct. 15-16—Virginia-Carolinas Automotive Wholesalers Assn., Fall meeting, Robert E. Lee Hotel, Winston-Salem, N. C.
Oct. 15-18—Automotive Wholesalers of Texas convention, Moody Civic Center, Galveston, Texas.
Oct. 20-22—1958 SAE National Transportation Meeting, Lord Baltimore Hotel, Baltimore, Maryland.
Oct. 20-24—46th annual National Safety Congress and Exposition, Chicago.
Oct. 24-25—California Automotive Wholesalers Assn. convention, Monterey, Cal.
Oct. 24-Nov. 2—Small Car and Aircraft Exhibition, International Amphitheatre, Chicago.
Oct. 27-28-29—New Jersey Automotive Trade Association, Chalfont-Haddon Hall—Atlantic City.
Nov. 3-6—Automotive Warehouse Distributors Assn. convention and manufacturers-distributors conference, Muehlebach Hotel, Kansas City, Mo.
Nov. 10-13—American Petroleum Institute 38th Meeting, Conrad Hilton, Palmer House and Congress hotels, Chicago.
Nov. 12—Connecticut Automotive Trade Assn., Hotel Statler, Hartford.
Nov. 14-16—Florida Automotive Wholesalers Assn. convention, Hollywood, Fla.
Nov. 22-29 excluding Sunday, Nov. 23 The Automobile Show, Grand Exhibition Hall of the Trade and Convention Center at 34th Street and Convention Ave., Philadelphia, Pa.
Jan. 17-25—1959 Chicago Automobile Show, International Amphitheatre.
Feb. 2-4—Automotive Accessories Manufacturers of America exposition, New

York Coliseum, New York City.
Feb. 15—Automotive Booster Clubs International executive counsel meeting, Conrad Hilton Hotel, Chicago.
Feb. 15-17—National Standard Parts Assn. National Convention, Conrad Hilton Hotel, Chicago.
Feb. 15-17—Motor and Equipment Wholesalers Assn. National Convention, Conrad Hilton Hotel, Chicago, Ill.
Feb. 16—Automotive Booster Clubs International board of governors meeting, Conrad Hilton Hotel, Chicago.
Feb. 17—Automotive Affiliated Representatives board of directors and membership meeting, Pick-Congress Hotel, Chicago.
Feb. 18—Automotive Booster Clubs International banquet, Conrad Hilton Hotel, Chicago.
Feb. 18-21—International Automotive Service Industries Show, Navy Pier, Chicago.
Feb. 26-27—American Petroleum Institute, Div. of Marketing, Lubrication Committee meeting, Sheraton-Cadillac Hotel, Detroit.
Feb. 27-March 8—1959 World Wide Auto Show, Miami Beach Exhibition Hall, Miami Beach, Florida.
March 12-15—Pacific Automotive Show, San Francisco Civic Auditorium, San Francisco.
May 3-8—Top Management Institute, Motor and Equipment Wholesalers Assn. Allerton House, University of Illinois, Monticello, Ill.
May 4-6—American Petroleum Institute, Div. of Marketing, Lubrication Committee meeting, San Marcos Hotel, Chandler, Ariz.
May 17-20—Automotive Engine Rebuilders Assn. convention, Royal York Hotel, Toronto, Ontario.
May 27-29—American Petroleum Institute, Div. of Marketing, midyear meeting, The Savery, Des Moines.



Service station operator William Davis (center) was top winner in AC Spark Plug div. of GM's "Selling Slants" contest. Prize was a \$10,000 U. S. Savings Bond plus cash for taxes. Duplicate award went to W. G. Cooley (right) sales representative for parts distributor in Klamath Falls, Ore., who orders AC products for Davis. Awards were made by S. W. Galloway (left), AC regional sales manager.

Walker Warehouse

Walker Marketing Corp.—a subsidiary of Walker Mfg. Co. of Wisconsin—has announced opening of its new Los Angeles warehouse. New building occupies approximately 18,000 square feet.



Shown above are the victorious Raybestos Brakettes after sweeping the World Softball Tournament with six consecutive wins. The girls' team is sponsored by Raybestos

Division, Stratford, Conn. (Standing 2nd from left, back row, is W. S. Simpson, general manager of Raybestos Division, Raybestos-Manhattan, Inc.

Ky. Wholesalers Form Association

A group of Kentucky wholesalers met late in August in Lexington to form the Automotive Wholesalers Association of Kentucky. Meeting climaxed several months spadework effort of a Steering Committee. Committee was headed by J. Paul Saunders.

At the August meeting J. S. Wright was chosen president; W. B. McGee, vice president; J. H. Yellman, 2nd vice president; and Gaylard Pack, treasurer.



Carl A. Johnson, left, receives keys to new MGA from Olin Mathieson's James C. Laney. Johnson won sports car in nationwide competition sponsored by Automotive Products dept. of Olin Mathieson Chemical Corp.



H. B. Hastings of North Carolina is shown taking over the presidency of the Automotive Parts Rebuilders Assn. at the group's recent Chicago convention. At right is William G. Weldon who had served term as president. Seated at left is Mrs. William G. Weldon.

Automotive Wholesalers' Sales and Inventories

Data from Bureau of the Census, Department of Commerce

Region	Sales			Inventories	
	July 1958 from July 1956	July 1958 from June 1958	7 Mos. 1958 from 7 Mos. 1957	July 1958 from July 1957	July 1958 from June 1958
	Per Cent Change	Per Cent Change	Per Cent Change	Per Cent Change	Per Cent Change
New England.....	+13	+15	-2	...	-3
Middle Atlantic....	+4	+6	+3	-3	-2
East North Central..	+2	+4	-3	+8	0
West North Central..	+11	-3	+6	+3	-1
South Atlantic.....	+10	+5	+1	+8	0
East South Central..	+4	+7	+3	+8	0
West South Central..	-3	-1	+2	+1	-3
Mountain.....	+7	+1	+6	+6	0
Pacific.....	+1	+1	+1	+7	+1
United States.....	+7	+3	+7	+2	-1

Indicators of Business Activity

These figures are based on latest thirty-day reports

	Latest Data	Month Before	Year Ago	Percentage Change from—	
				Month Ago	Year Ago
PRODUCTION					
Motor Vehicles (Units).....	230,046	388,572	614,846	-40.8	-62.6
Industrial—F. R. B. 1947-'49=100 (Adj.)..	125	132	135	-5.3	-7.4
SALES					
New Cars.....	390,000	404,900	491,839	-3.7	-20.7
Replacement Tires (Units).....	7,442,064	7,181,826	6,645,575	+3.6	+12.0
Manufacturers (\$ Millions)					
Durable Goods.....	\$12,326	\$12,096	\$14,573	+2.0	-15.4
Non-durable Goods.....	\$13,964	\$13,661	\$14,457	+2.2	-3.4
Department Stores, 1947-'49=100.....	140	133	138	+5.3	+1.4
GENERAL					
Consumers' Price Index, 1947-'49=100....	123.9	123.7	120.8	+0.2	+2.6
Civilian Employment.....	65,367,000	65,179,000	66,385,000	+0.3	-1.5
Unemployment.....	4,699,000	5,294,000	2,609,000	-11.2	+80.1

Motor Age's Who's Who



A. R. Mackie, photo, has been appointed manager of the Minneapolis branch office of the Automotive Division of Wagner Electric Corporation. He succeeds **J. R. Williams** who has been named sales manager, Automotive Parts Division, Canada.

Three new managers have been appointed by the Tuthill Spring Company. **Thomas J. Moore, Jr.**, general sales manager. **W. R. Walker**, manager of original equipment sales and **Don Nelson**, manager of replacement springs sales.



Jack K. Myers, photo, has been appointed branch manager and **Horace O. Hunt**, assistant branch manager of the Philadelphia office of The Timken Roller Bearing Company.

Virgil E. Urbine has been named to head Customer-Plant Mechanics Department in the Detroit area for The Electric Auto-Lite Co. **Robert G. Stubbs** has been appointed special Detroit representative of the firm's Electrical Products Group.

Paul J. Wolfert has been appointed to the newly created position of marketing director of Napco Industries, Inc.



E. W. (Herb) Taft has joined World Bestos, New Castle, Indiana, as district manager for Delaware, Maryland, District of Columbia and eastern Virginia.

O. T. Sutton and **George F. Pletz** have been appointed district sales managers of the Maremont Muffler Division of Mar Pro, Inc.

James A. Perham, chief product engineer of the Thor Power Tool Company's Aurora, Ill. Works, has been named chief engineer of Thor's Speedway Manufacturing Company division at LaGrange Park, Ill.



William C. Goetz, left, has been appointed distributor sales manager and **James V. Huebner** has been transferred to the position of sales engineer for the Form-sprag Company, Mich.



Robert H. O'Boyle, left, has been named assistant sales manager for Pyro anti-freeze and Pyro radiator chemicals, automotive products dept., Olin Mathieson Chemical Corporation. **Allan J. Lembitz** has been appointed automotive products advertising and sales promotion services manager for the company.

Frank J. Ehringer, formerly manager of Electroschwitch Division of Tung-Sol Electric Inc. has been promoted to general manager of Automotive Products.

Ralph J. Caletri has been named staff assistant to the director of Automotive Sales, Bendix Products Division of the Bendix Aviation Corporation.



Recent appointments of United Motors Service Division of General Motors are: **Thomas F. Plant** to general sales manager from assistant general manager, eastern region; **Edward L. Lape** to operations director from general sales manager; **William M. Walker, Jr.**, to executive assistant to the general manager from operations director; **Albert E. Schwerzel** to assistant general sales manager, eastern region, from Atlantic regional manager; **William A. Price** to Atlantic regional manager from New York zone manager.

John H. Baer has been selected to fill the newly created post of sales manager-administrative for the Mobile Hydraulics Division of Vickers Incorporated, Division of Sperry Rand Corp.



Joseph G. Baker has been appointed manager of the Jobbing Division of Turco Products, Inc.

Clyde C. Hill has been appointed eastern district sales manager for Victor Manufacturing & Gasket Co. He succeeds **Harvey B. Mims**, who retired.

R. C. Cunningham will represent the Shure Manufacturing Corporation of St. Louis in the states of Tennessee, Alabama, Mississippi and southern Florida.





Modernizing Program for this Volume Shop

*Expanding buildings and floor space as needed is
standout principle with this successful shop owner*

LAST winter while a number of businessmen firmly tightened financial belts an alert shop owner on the outskirts of Philadelphia launched a \$25,000 modernization program.

"Recession? I haven't felt it," explains owner Joe Kosak.

His station, 45 feet from Highway 611, stood sparkling under a new jacket of porcelain. The interior smelled of fresh paint.

The rear body area was a scene of growth: Dirt was heaped high, wires hung from the ceiling, a gaping, circular hole awaited a hoist. Outside a freshly black-topped driveway encircled the station like icing on a cake.

Joseph Kosak's annual volume is a commendable \$175,000. Discounting gasoline pumpage, the station services an average of
(Continued on next page)

Front view of Kosak's Servicer on Highway #611.



Shop of the Month

... continued from preceding page

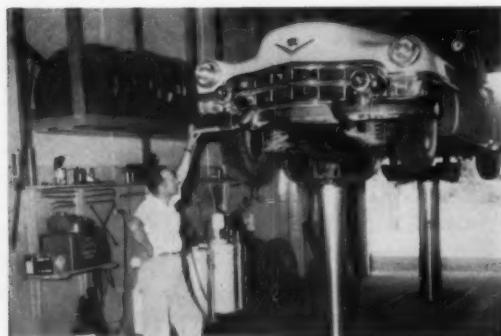


By John Lawrence, Associate Editor



Lubrication department makes use of two-post lift.

Below: same lift is a big asset in helping to sell related service work for cars in for a lubrication.



25 cars daily. This includes body repair, tune-up, brake adjustment and repainting.

His parts department, housing body and mechanical parts, spawns an average monthly turnover of \$5,000. Kosak claims this is due to perpetual selling. "What the customer wants—he gets," he explained simply. He also maintains a warehouse for tires and anti-freeze.

Kosak views are sensible. His station operates on a formula that has drawn uninterrupted business. Before examining the formula, let's view 44-year-old Joe Kosak and his station.

A former factory worker, Kosak rented his first station in nearby Souderton, Pa. in 1943. Faring well, he bought the ground of his present location four years later and promptly built a moderate station. It had room for six cars and sported a two-post lift. Kosak confined himself to general repair, besides pumping gasoline. Although located on a highway, his trade was distinctly local. Merely four or five cars dwindled in daily. Gradually his business and reputation mounted.

Built Addition Four Years Ago

Four years ago he built a 35 by 70 foot



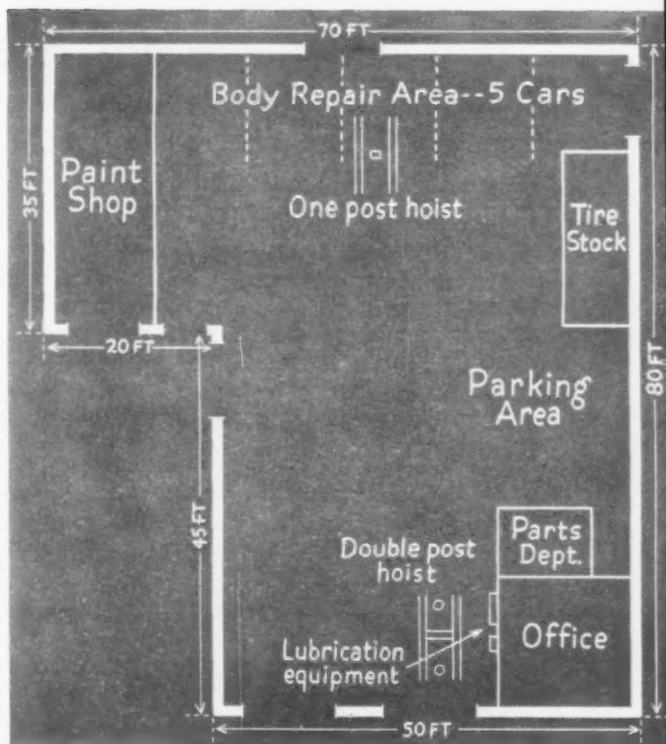
Top left (opposite page) is shown a portion of the body repair area. Photo directly above is view of Kosak shop showing entrance to service area; below is detailed diagram of shop's use of floor space.

rear addition. Today this area is a reliable body shop itself. With space for five cars, it contains front-end equipment, valve grinders, electric and gas welding, a lift, air compressor, and, naturally, reputable body tools. Kosak also had the foresight to install an adjoining paint department. There is now a waiting list for its 500 watt lights.

The rear body area is accessible by three large overhead doors. These look as if they would admit the largest trailer. Kosak admitted he once repaired trucks, but discarded it because of inconvenience to customers. This is a credible reason. Outside, 22 cars sat waiting for service.

The former factory worker employs four salaried mechanics and two helpers. Two more serve on a part-time basis. His employees are experienced, tools the finest. Business, sometimes relentless, has removed the necessity of newspaper advertising. To meet his promissory schedule, Kosak opens at seven, closes at eleven. Two wreckers interminably supply his body repair with additional work. But body repair is not his major work, although it's indeed profitable. Tune-up, Kosak claimed, remains his major service.

(Continued on page 104)





Chop, Chop That Overhead!

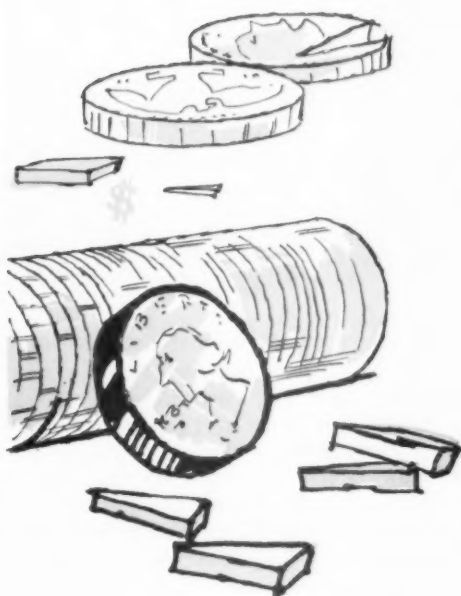
IT IS quite understandable why business spotlights are focusing with deeper penetration on the bugaboo of overhead. Since increasing sales volume and reducing merchandise costs are obvious areas for increasing profits, they are usually watched rather closely. As business gets rougher the ten-

dency is to look in other directions. Directions where competition and capitalization aren't the limiting factors they are in merchandising.

Just what is meant by overhead? Overhead means the costs of operating the business. Merchandise cost is excluded. The monies



Management Story of the Month



A searching look at some of the factors bearing on overhead controls; both fixed and variable type

withdrawn by the owners, whether called salaries or drawings, are likewise excluded.

Items of overhead are generally classified as either fixed or variable. Fixed items are those that remain the same regardless of changes in sales volume, such as rent, interest, depreciation, etc. The variable overhead

charges tend to increase with increased sales and vice versa, examples being telephone expense, payroll taxes, etc.

At times it is also advisable to set up a category for semi-variable items of overhead, this group encompassing those charges which vary with sales volume but not in the same ratio as variable items.

Generally speaking, however, the smaller business unit finds the fixed and variable analysis sufficient for its needs insofar as obtaining knowledge about overhead is concerned. Some business managers use the words "controllable" and "uncontrollable" rather than variable and fixed. In general, businessmen tend to concentrate on the controllable overhead items insofar as the search for minimizing goes. However, that should not detract from the fact that many dollars can be saved in the uncontrollable group too. The important thing to remember is this: try to reduce all item of overhead to irreducible minimums.

How shall we go about trying to reduce our overhead?

(1) Internal comparison—Here we compare the ratio (or percentage) of a given item of overhead to our sales volume for one representative period with the same ratio for another representative period. This information is easily obtained from the profit and loss statements, which (in order to be considered representative) should cover a 6-month period at least. Thus, if it is found that insurance for period A amounted to 2 per cent of our net sales and that for period B it was 6 per cent it would appear that closer scrutiny is needed.

(2) External comparison—Compare your items of overhead, percentage-wise, with figures for your industry obtainable from (a) Dun & Bradstreet, or (b) trade association, or (c) Department of Commerce field offices.

(Continued on page 111)

PROFITS and how with ENGINE OVERHAUL

Complete overhauling of the engine is discussed with a very special emphasis put on replacement techniques for worn parts

WHEN reconditioning an engine it pays to check all the factors that control oil pumping, engine noises and cooling.

The engine should be completely disassembled. Then the block should be thoroughly cleaned and all parts degreased. Examine the cylinder block for cracks. Then recondition the cylinders to fit oversize pistons. Replace the camshaft bearings and check the camshaft lobes for wear and scoring. Grind the crankshaft to the nearest undersize bearing.

Installing Piston Rings

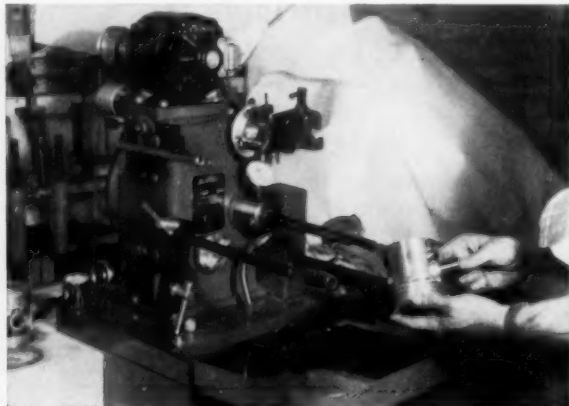
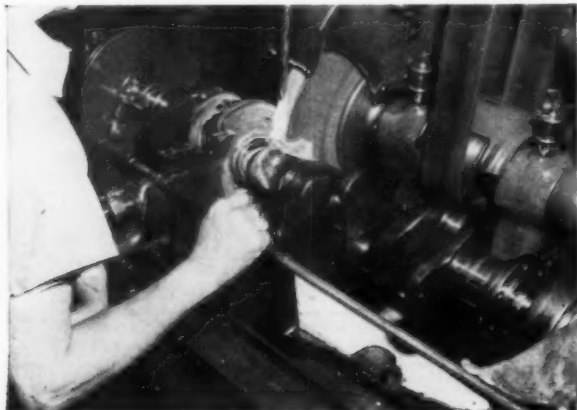
Connecting rods should be carefully checked for alinement and corrected as needed.

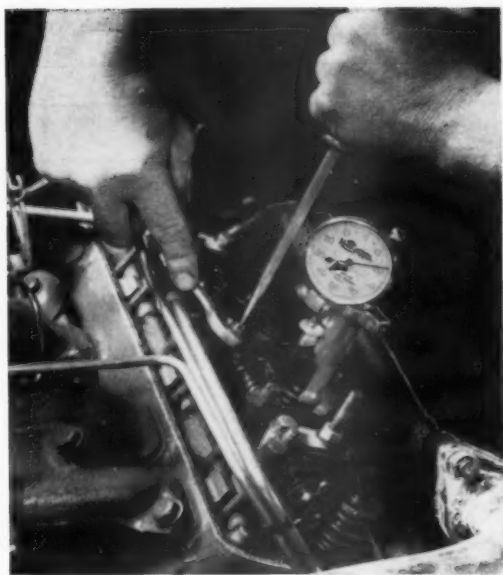
Crankshafts are salvaged by grinding scored journals to take a stock undersize bearings.

All rings should be installed according to the manufacturers instructions. If a ring installing tool is not available, care should be exercised not to twist the rings or expand them excessively. Excessive twisting or expansion often permanently distorts the rings; results in unsatisfactory performance.

Ring gaps should be checked on every job. Push ring part way down the cylinder with the top of an inverted piston and check the ring gap with a feeler gage. If the engine manufacturers specs are available use them. Otherwise the following gaps have proven successful. Up to and including 3½ inch bore, minimum gap .007 inch. A 3⅞ to 4⅜ bore, minimum gap .010 inch; 4⅞ to 5¼ in. bore

A special machine is shown fitting new wrist pins to the pistons and the connecting rods.





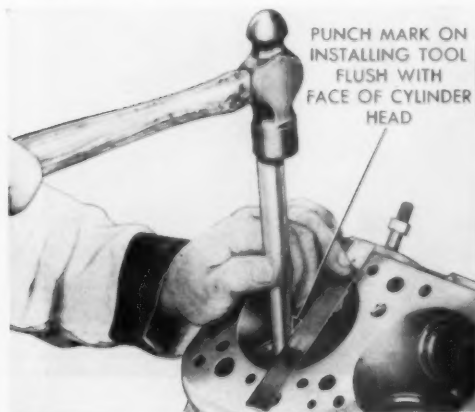
Gage to check valve adjustment and cam lifts.

.013 inch. Ring gap less than above specs may cause the rings to scuff and break.

With each new compression ring installed in its groove and the face of the ring flush with the face of the ring land, it should be possible to insert a .015 in. feeler gage beside the ring completely to the bottom of the groove. Oil rings should be free in the groove.

If the ring groove is too narrow and the clearance is less than .015 inch, the width of the ring should be reduced by rubbing the top side of the compression and the bottom side of the oil ring on emery cloth,

New valve guides should always be installed in same relative position as the old ones.



held flat on a face plate or a piece of plate glass. When the proper width is obtained, the side of the ring where the metal was removed should be polished with crocus cloth.

Immerse in Oil

When assembling the pistons and rings to the engine each piston should be immersed in heavy engine oil. This will provide adequate lubrication when the engine is first started.

For rings to function properly, sufficient lubrication must be available immediately upon initial starting of an engine. If not available, scuffing of rings could occur damaging the rings and their ability to function properly.

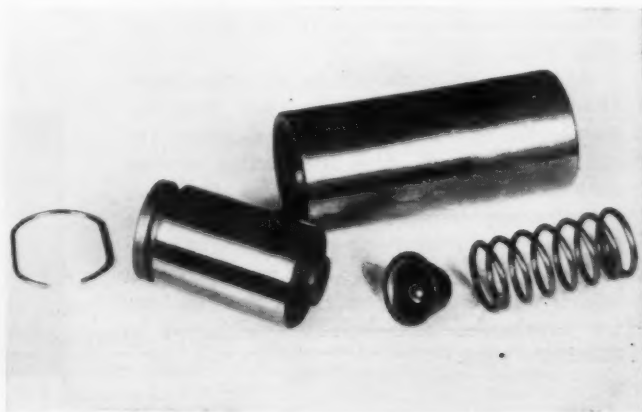
Lubrication to pistons, rings and cylinders is partially controlled by bearing throw-off and speed of the engine. Therefore it is most important to adhere to the manufacturers bearing clearance specifications.

Another good recommendation is to use a pressure tank to prime main oil lines. This assures sufficient lubrication immediately upon starting the engine. Another method is the introduction of oil through the carburetor upon starting. This method assures adequate lubrication to the top rings until oil is supplied from below.

Make sure the ignition timing is set correctly. Detonation is the major cause of top ring breakage, the breaking of the band below the top ring, and the disintegration of the top ring and the top ring groove.

(Continued on next page)

Hydraulic lifters should be taken apart, cleaned and examined for wear.



Engine Overhaul Profits

Continued from preceding page

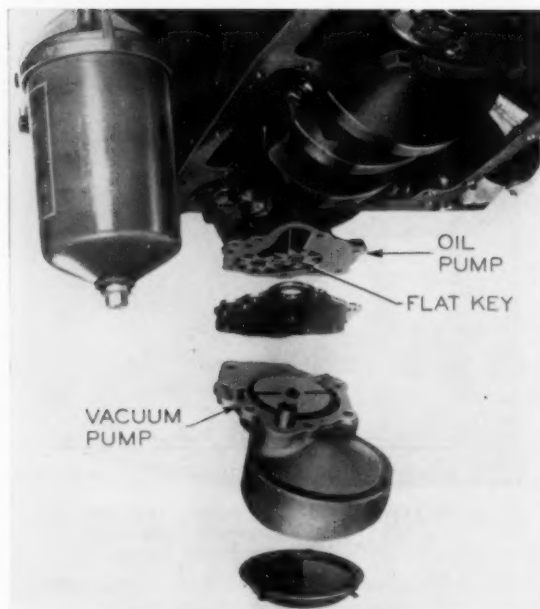


Before installing the new rings, carefully read and adhere to the manufacturer's instructions.

This premature explosion, which is basically what detonation or knock is, produces very sharp blows on the top ring. In time these blows fracture it. Detonation also has the tendency to loosen the head gasket and allow water to leak into the combustion chamber, causing damage to the piston and ring lands.

Rebored cylinders often detonate more than standard cylinders because compression ratio is actually increased when the engine is rebored. Also the cooling system may be less effective. The practice of planing or grinding cylinder heads will also raise the compression and aggravate detonation.

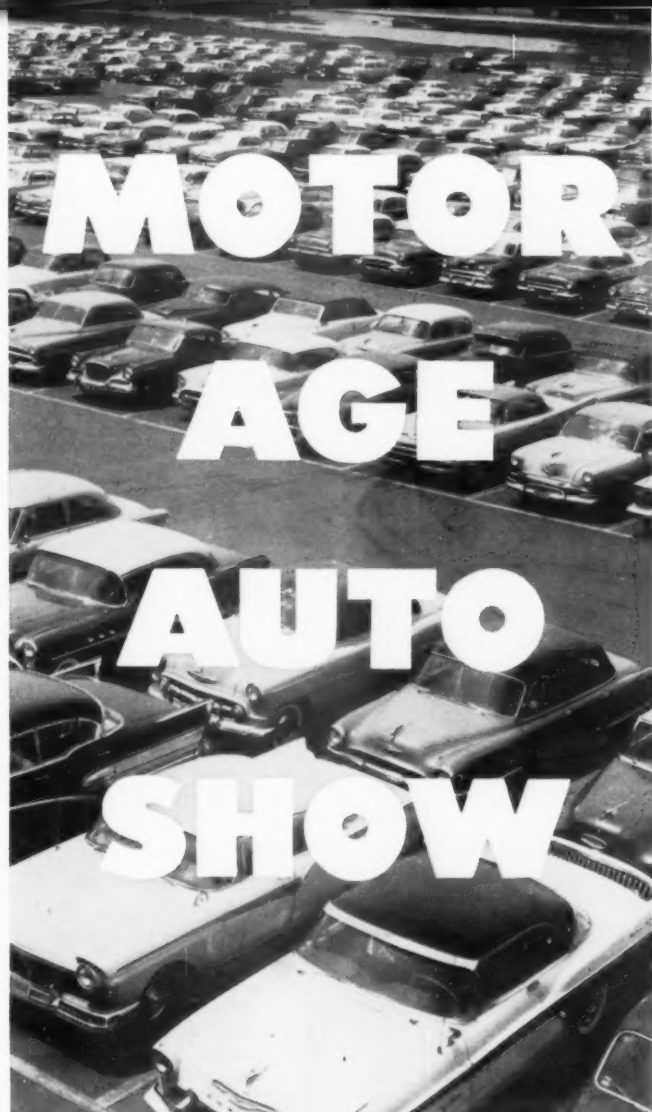
To avoid detonation use gasoline of a higher anti-knock rating. Keep the distributor overhauled and carefully adjusted to eliminate ping.



Take oil pump apart and check for signs of wear.

When you are installing the new rings, it is important to maintain proper land clearance.





THE trumpets sound . . . the curtain swings wide for the newest and finest products the automobile industry has yet developed . . . the 1959 models.

For you, the reader of Motor Age, we have gathered the latest information on all the new cars that has been released up to October 15.

Familiarize yourself with these descriptions for many of your customers will be asking you about them. We described the 1959 Buick in our September issue (pages 44 and 45) and will continue the Motor Age Auto Show in our November publication.

SHOWS AND DATES

OCTOBER

- Oct. 4-19—Texas State Fair Automobile Show, Dallas.
Oct. 22-Nov. 1—Motor Show, Earls Court, London.

NOVEMBER

- Nov. 5-16—Turin Auto Show, Turin, Italy.
Nov. 14-23—Los Angeles Auto Show, Pan Pacific Auditorium, Los Angeles.
Nov. 21-30—St. Louis Auto Show, St. Louis.
Nov. 22-29—Philadelphia Auto Show, Philadelphia.
Nov. 22-30—Detroit Auto Show, Artillery Armory, Detroit.
Nov. 29-Dec.-7—Houston Auto Show, Houston.

JANUARY

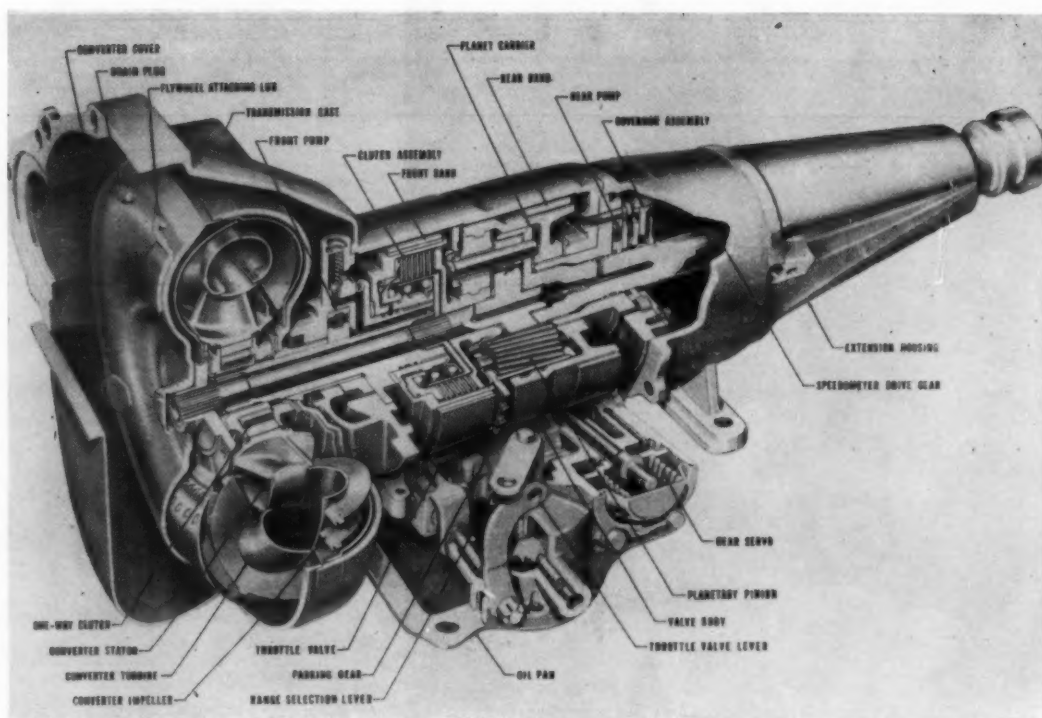
- Jan. 9-18—Midwest Auto Show, Municipal Auditorium, Minneapolis.
Jan. 10-17—Pittsburgh Auto Show, Hunt National Guard Armory, Pittsburgh.
Jan. 17-25—Chicago Auto Show, International Amphitheatre, Chicago.
Jan. 22-27—Tampa Auto Show, Fort Hesterly Armory, Tampa.
Jan. 25-Feb. 1—International Foreign and Sports Car Show, Diner Key Auditorium, Miami.

FEBRUARY

- Feb. 19-23—Albuquerque Auto Show, State Fair Coliseum Bldg., Albuquerque.
Feb. 27-March 8—1959 World Wide Auto Show, Miami Beach Exhibition Hall, Miami Beach.

APRIL

- Apr. 6-11—Denver Auto Show, Denver Auditorium, Denver.



Cutaway view of new lightweight Ford-O-Matic transmission of two-speed design.

FORD offers new lightweight automatic transmission

SOME distinctive engineering developments plus many sheet metal styling changes combine to create an attractive line of Ford cars for the 1959 market. Mounted on a wheelbase of 118 inches, the Ford family of cars has these series: Custom 300, Fairlane, Fairlane—500, and Station Wagons.

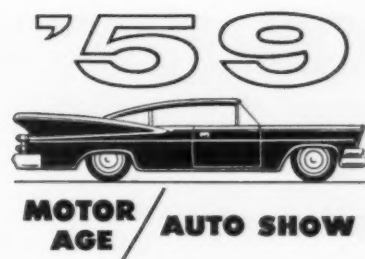
Perhaps the most important mechanical change is found in the introduction of an entirely new Ford-O-Matic transmission of two-speed design. It adds only 18 lbs. of

weight by comparison with a standard synchromesh transmission. Also has 105 less parts than the former design. Is reported easier to service. Ford states that this drive should offer the customer the lowest priced automatic in Ford's history.

Cruise-O-Matic drive, used last year, is available as optional equipment with "the 332 and the 352 engines."

Engines available are the six cylinder "223" with single barrel carburetor. Then the "292", a V-8 engine with two barrel car-

New Ford-O-Matic adds only 18 pounds of weight in comparison with standard synchromesh transmission



buretor; the "332", a V-8 engine with two barrel carburetor; and "352", a V-8 with four barrel carburetor.

Noteworthy, too, is the fact that the so-called Limited Slip differential, offered as optional equipment, now is Ford-designed and will be manufactured at the Ford Sterling plant. In this design the differential is locked at all times until slipping action is

required. Secret of the device lies in the use of a constantly pre-loaded clutch, set to slip at torque values between 315 and 385 lb. Thus slippage will occur only when the force on either wheel exceeds this value.

The clutch consists of two friction-coated steel plates sandwiched between three steel plates. The outside plates apply pressure

(Continued on page 114)

Two-door sedan model at right is of the Custom 300 series. Below is a Fairlane 500 series convertible.





1959 Chevrolet Bel Air four-door sedan.

CHEVROLET Restyles Series

IN shape, and in detail, the new styling of the '59 Chevrolet has lines that sweep rearward in a level plane. Tops are flatter and visibility is increased.

Appreciably lower, the overall appearance of fleetness is conveyed by a sculptured frontal area. At the rear, horizontal wings branch out from the center of the deck.

A new six-cylinder engine, the Hi-Thrift, has been introduced. It is said to be added economy through re-design in valving and carburetion. It heads a list of nine engines.

The conventional coil spring suspension has been refined at the rear for the purpose of minimizing shocks and instability that might be transmitted by suspension links. Refinements have been made in the optional level air suspension to acquire softer, quieter operation.

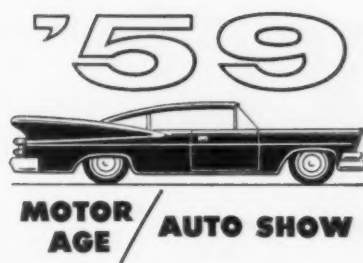
Enlargement of brake surfaces and cooling features in the new Chevrolets assure longer wear. The brake lining area has been increased from 157 to 199.5 square inches, or 27 per cent.

Tires have been improved for durability and reduced in rolling resistance through newly developed cords, which are said to run cooler and offer a softer ride.

The 1959 Turboglide has been strengthened to supply the unit with a greater durability margin. Multiple discs replace cone clutches, making the unit more rugged for such loads as prolonged rocking. Six active faces are applied to the reverse clutch, eight to the forward clutch. Other parts of the transmission have been similarly toughened.

Other mechanical highlights of the new Chevrolets are: Easier steering and the in-

New Chevrolets offer new design features, improved brakes, suspension system and handling advancements



Chevrolet's 1959 Impala Sedan.

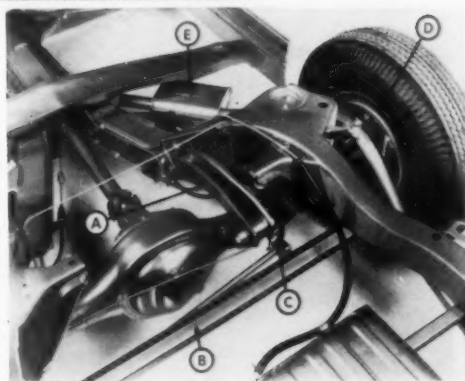
clusion of a second, shock-resistant universal joint. Also a radiator with an increased cooling area and a simplified, more productive electrical system.

An increase in passenger room is exemplified by almost five inches more width in the five and one-half foot front seat. With 20 per cent greater capacity, the trunk has been increased up to 32 cubic feet. The cargo space in station wagons has been lengthened to almost eight feet.

Reduced in Height

Sedans have been reduced in height one inch; sport models two inches. Through lower body mountings and a new roof configuration, the advantage has been accomplished without sacrifice, and in some cases an actual

(Continued on page 106)

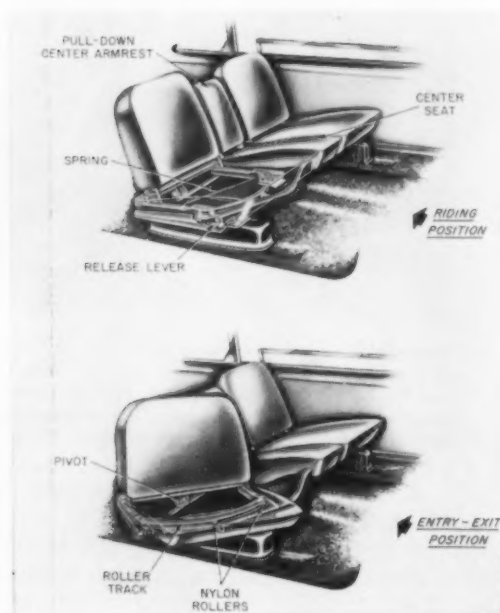


Chevrolet's chassis improvements for '59 are: (A) New rear suspension upper control arm. (B) New frame cross-member. (C) A second suspension control arm. (D) New brakes. (E) A resonator installed between muffler and tail-pipes.



Plymouth's four-door station wagon for '59.

PLYMOUTH Stresses "Massive" Look



*Triple control tower
windshield, new pivot front*

THE new Plymouth for 1959 is lower, wider and more massive-appearing. The front section of the body is keynoted by new "double-barreled" fenders which set off the dual headlamps. Curved parking lights are used. Set into the extreme ends of the grille, lights can be seen from front or sides.

New roof panels were designed for two and

New front swivel seat arrangement is shown. Arm rest folds back for a third front seat.

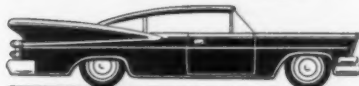


Above: New push-button heater controls send warm air to all parts of the car.

Right: Chrome-capped fins and "Imperial" look of rear deck lid denotes '59 Fury.



'59



**MOTOR
AGE / AUTO SHOW**

seats plus body styling changes offered in '59

four-door Plymouth hardtops. The reason? To accomodate the triple-curve "control tower" windshield. Rear-end styling has been modified. Chrome-capped fins of the new rear quarter panels extend farther forward. Rear edges of the fins are raked forward from bottom to top.

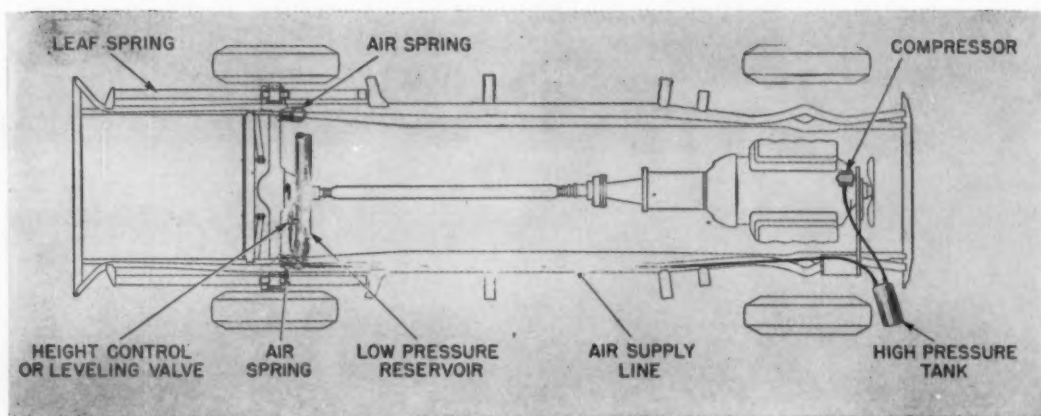
Engine-wise, a number of design changes have been made on the six cylinder powerplants. These include improved exhaust valve design; use of higher alloy steel in exhaust valve seats; and use of higher lubricating oil pressures. This latter by using a higher

capacity oil pump and new floating oil intake screen.

This six cylinder engine—the Powerflow six—will be available on Savoy and Belvedere models. Displacement is 230 cu. in. Bore and strokes: 3.52 x 4.63 in.; compression ratio is 8 to 1.

Wheelbase on the Plymouth runs 118 in. Using a four-door sedan as the standard, the overall length of the car for 1959 is 208.2 in. Overall height runs 56.6 in. (4-door sedan again) and width is 78 in.

(Continued on page 116)



The '59 Chrysler New Yorker and diagram of Chrysler Corp.'s new air suspension system is shown above.

New Engines for CHRYSLER

*New cooling system featured
in the Chrysler's 383
and 413 cu. in. powerplants*

ENTIRELY new 383 and 413 cu. in. engines are being introduced for the Chrysler line. One of the outstanding features of the new powerplants is the new cooling system. Coolant required now is 16 quarts. Twenty-five quarts were required previously.

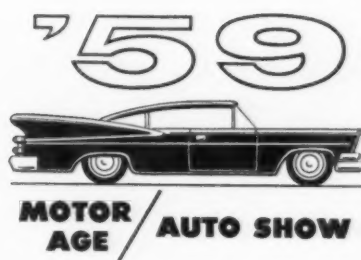
The Chrysler Windsor is offered with the 383 cu. in. V-8. Compression ratio is 10 to 1. Two-barrel carburetor is standard. Dual exhausts are standard on the convertible model of the Windsor.

The newly-designed 413-cu. in. V-8 is standard on Chrysler New Yorker models. Compression ratio is 10 to 1 and the bore and stroke 4.18 x 3.75 inches. A four-barrel carburetor and dual exhausts are standard.

(Continued on page 105)



New front-end treatment is shown on '59 Imperial. At right: Chrysler's electronic rear view mirror.



Over-all body and frame strength improved in '59

TO Imperial's classic lines, have been added new touches of splendor for 1959. Imperial has a new frame for 1959, contributing to passenger comfort, both front and back. Over-all body and frame strength is improved also.

Side rails of the new frame were designed to accommodate a new rear floor panel which is $2\frac{1}{2}$ inches lower than on the previous model. This gives more leg room in the rear seat.

Front-end appearance has been transformed by an unusually bold new grille, headlamp, and bumper treatment. The grille consists of a large horizontal chrome bar with five heavy vertical cross pieces. Headlights are placed lower. The front bumper is large and styled low to give the car a low,

IMPERIAL offers 3 Hardtop Roof Options

wide and thrusting appearance.

The new rear bumper is larger; has a semi-oval appearance that blends in with the Imperial's fin treatment. Rear-end appearance is enhanced by a large chrome deck lid medallion. Medallion bears the Imperial eagle design.

The Imperial, Crown Imperial, and Imperial LeBaron for 1959 are powered by a 413 cu. in. engine. Compression ratio is 10 to 1. Bore and stroke is 4.18 x 3.75. A four-barrel

(Continued on page 91)



Front-end view of De Soto's '59 Firelite.

*Massiveness stressed
in new front-end styling*

New side-sweep treatment for DESOTO

STYLISTS have given De Soto a complete personality change.

Keynote of De Soto's front-end styling is massiveness. Dual headlights are set lower, capped by bold new front fenders. Stylists used every front-end line to stress width and lowness. Dominating the front is a massive, horizontally-divided bumper. Between the

new bumper's upper and lower sections, an air scoop extends virtually the full width of the car.

A newly-designed narrow aluminum grille with horizontal lines stretches across the top of the front bumper between the headlights. De Soto's newly styled rear-end includes a

(Continued on page 102)

Long, low lines of the two door hardtop is seen in the De Soto Firelite Sportsman.





Chrysler Corp. option is swivel seats.



Dodge makes change in front-end styling

DODGE takes a departure from front-end styling. A new effect is achieved by sharply flaring the fender eyebrows upward and outward, as opposed to the squared-off line of the past.

Dodge rear-end styling is highlighted by a new flared fin treatment and jet-tube tail-light design. Rear quarter panels have been newly-styled to give an even more fleet appearance.

Engines Offered

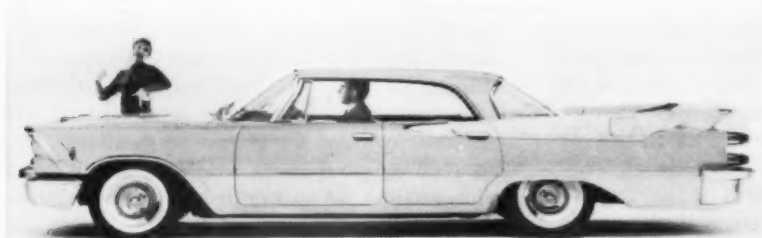
Dodge will offer a six-cylinder engine in addition to V-8s on its Coronet models. Displacement of the engine is 230 cubic inches, compression ratio 8.0 to 1 and bore and stroke 3.25 x 4.63 inches.

Two versions of Dodge D-500 engine available as option

The Dodge Coronet standard V-8 is a 326-cubic inch engine with a compression ratio of 9.2 to 1 and bore and stroke of 3.95 x 3.31. A two-barrel carburetor is standard on this engine. Dual exhausts are standard on convertibles and optional on other models.

A 361-cubic inch V-8 is standard on Dodge Royal, Custom Royal and station wagons.

(Continued on page 94)



Dodge's new four-door hardtop shows newly-styled roof and back window.



Station wagon model is pictured above. At right is shown a Rambler American.



The 127 hp six comes equipped with Visi-Flo fuel economy carburetor

Rambler shows 11 models

AMERICAN Motors introduced its new 1959 Rambler the end of last month. The car features new exterior and interior styling, and engineering changes.

Eleven models—including station wagons, hardtops and sedans—are offered in the six and V-8 series.

The new die-cast grille is made of two pieces to minimize repair costs if the car is involved in an accident.

Both front and rear bumpers, which feature recessed areas for license plates, are made of steel which is 23 per cent heavier than previously for greater strength and durability.

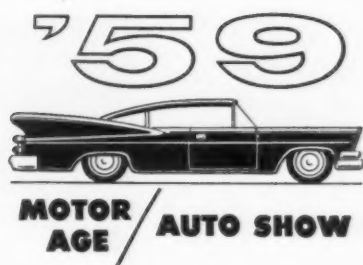
The 1959 Ramblers retain the same overall exterior and interior dimensions.

Economy of operation continues as one of the main features of the 1959 Rambler. The 127-horsepower economy-champion Six is equipped with a new Visi-Flo carburetor designed to increase fuel economy by 1½ miles per gallon of regular-grade gasoline. The carburetor's glass bowl allows quick checking of float operation and of any sediment deposits. A new fiber element air cleaner is standard.

A dual-throat carburetor with oil-bath air cleaner, which boosts the Rambler Six horsepower to 138, is available as optional equipment. This option provides power gains at speeds over 50 miles per hour.

(Continued on page 95)

*Six different models—all
four door variety—are
offered on 117 in. wheelbase*



Ambassador Rambler four-door hardtop below has 117 in. wheelbase.



Ambassador restyles rear fins

THE new 1959 Ambassador by Rambler, is a compact luxury model on a 117-inch wheelbase.

Six models, all with four doors, are offered. They include a super sedan and station wagon; a custom sedan and hardtop sedan, a custom station wagon and hardtop station wagon.

The Ambassador's new grille features a simple, single chrome bar. The bar extends across the full width of the grille opening.

It is accentuated by chrome strips above and below. The combined parking lights and directional signals are integrated into the ends of the grille bar. A new eagle-crest medallion is centered on the grille bar. The name "Ambassador" is spelled out in large block letters above the grille.

The redesigned fins on the 1959 Ambassador extend from the top of the rear fender into the rear door panel. A thin spear panel
(Continued on page 96)



PONTIAC features New Body

*Displacement of Pontiac's
V-8 Engine raised to 389 cu. in.*

At right: two-door
hardtop model shows
long sweeping appear-
ance of new Pontiacs.

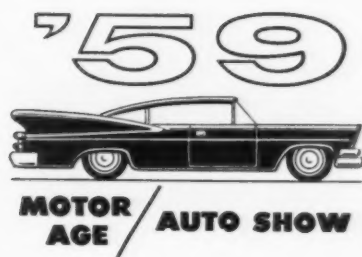
PONTIAC has launched its 1959 line by featuring entirely new bodies mounted on a redesigned frame. Highlights of the new chassis is an increase of almost five inches in the tread, to 63.72 in. front, 64 in. rear. This will contribute toward improved stability and riding comfort as well as better control.

The displacement of Pontiac's V-8 engine has been increased to 389-cu. in. It has a bore of $4\frac{1}{16}$ in., stroke of $3\frac{3}{4}$ in. The engine will be offered in three compression ratios—8.6 to 1, 10 to 1, and 10.5 to 1. There will also be a choice of 2-barrel, 4-barrel, and three, 2-barrel carburetor combinations to provide a wide range of horsepower.

(Continued on page 117)



*Both Engines—the 371
and the 394 cu. in.—feature
newly designed cylinder blocks*



OLDS offers Two Engines



Super 88 "Scenicoupe" Olds has large dome-like rear window with heat-reflective glass.

A LINE of completely redesigned cars, has been launched by Oldsmobile for 1959. The cars are low and have a wider base on the ground. This is due to an increase in tread to 61-in. front and rear. Four-door sedans are all of the six-window type.

All models have windshields with 46 per cent more glass area. Holiday Hardtop Sport Sedans are of four-window type with a flat, slim roof and a wrap-around rear window. Holi-

day Scenicoupe models (hardtop coupe) have a large, dome-like rear window fitted with a special heat-reflective glass which is standard on all models.

The engine set-up is of major interest. There are two engines this year. The 371-cu. in. economy engine further improved for the Dynamic 88. Also a 394-cu. in. engine for the Super 88 and the 98. The cylinder block for both engines is new to provide for greater

(Continued on page 108)



Fresh styling treatment for CORVETTE

FIRST of the postwar "dream cars" to become a production reality, Chevrolet's spirited, snug-bodied Corvette boasts a fresh styling treatment and even more responsive control for 1959.

As in the previous five years, the Corvette will be built exclusively as a two-seater.

New for 1959 are the smooth, unornamented hood and rear deck surfaces. Also a refined interior that includes a re-designed seat. Then too are varied options in more durable acrylic lacquer exterior finishes.

The principal chassis change is found in a revision of the rear suspension. It provides handling precision. Particularly during rapid acceleration and quick stops. Also noteworthy, brake cooling has been improved.

Again for 1959, the sports car enthusiast is offered a wide choice of power trains. Five

Brake cooling and rear suspension has been improved on '59 Corvette

V8 engines ranging from 230 to 290 horsepower can be combined with manually operated three or four-speed transmissions. Or with the automatically shifting Powerglide. Fuel injection is specified in two of the power packages.

Chevrolet has incorporated increased luxury, comfort and safety in the cockpit of
(Continued on page 95)



Front and side views of new '59 Cadillacs.

New silhouette for **CADILLAC**

*New engine, styling
and engineering
changes featured*

NEW concepts of traditional Cadillac engineering and design were emphasized throughout the entire line of new Cadillac cars.

The 1959 Cadillac line consists of six series of cars: Five standard series which feature 12 body styles and one custom series (Eldorado Brougham) with one body style.

Dramatic styling appears in the exterior

design of all models. There is a new forward treatment of the grille and hood. The wider hood now extends on either side to the very center of the fenders. This feature provides better access to the engine compartment while allowing the fender crown molding to conceal the hood opening lines.

The 1959 models have the largest glass area
(Continued on page 115)



Three power trains are offered including an economy six-cylinder engine



Top left: El Camino combines style with utility. Above: '59 Chevrolet Apache 36 stepside pickup.

CHEVROLET **adds El Camino** **to truck line**

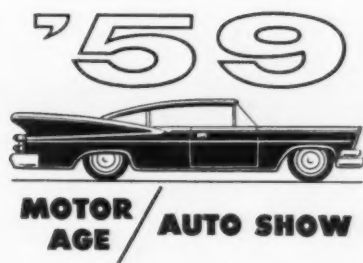
"MORE than a car—more than a truck," the El Camino, new to the Chevrolet line for 1959, combines bold, fleet passenger car styling, comfort, handling, and appointments with truck utility.

The El Camino, which goes on display at Chevrolet dealerships October 16, is designed as a dual-purpose vehicle. One use: for personal transportation; 2) for hauling light or bulky loads up to 1150 pounds.

In its styling with low belt line, large windshield raked back into the slim-lined roof, the El Camino carries a distinct passenger car concept. The extensive glass area measures 4121 square inches; affords control-tower visibility to front, sides and rear.

Three power trains are available with the El Camino. An economy six-cylinder engine, which has shown up to 10 per cent improvement in fuel mileage in commercial tests, and three-speed manual transmission are standard equipment. Overdrive and Power-

(Continued on page 110)



Dodge "100" pick-up truck shown at left will carry more than 1600 pound payload.

New line of style-setting trucks designed especially for farm and ranch owners

New series DODGE pick-up trucks

THE 1959 line of Dodge trucks offers a completely new series of pick-up trucks especially designed for farm and ranch owners. Dodge Truck engineers have given special attention to the desires and needs of agricultural users. The new pick-up trucks are called the Sweptline.

The smooth-sided Sweptline models are powered by a 120-horsepower 6-cylinder or a 205-horsepower V-8 engine. Available in half, three-quarter, and 1-ton models, they have body lengths from 6½ to 9 feet. Capacities range from 59.7 to 84 cubic feet; pay-

loads from 1,775 to 3,475 pounds. The new servo-type brakes on half-ton models have a total lining area of 192 square inches.

"Every hauling need on farms and ranches can be met by one of our new 'M' Series models," said M. C. Patterson, general manager of Dodge. "We are offering 6 and 8-cylinder engines with 11 different horsepower ratings ranging from 113 to 234."

Another feature is the concealed running board on low and medium-tonnage models. In addition to protection against bad

(Continued on page 91)


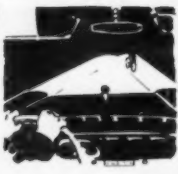


November 1958

ASL

MOTOR AGE'S



QUICK CHECKS FOR QUICK PROFITS

SUN.	MON.	TUES.	WED.
2 	3 BODY REPAIR WEEK	4 "NO CAR NEED LOOK TOO OLD IF BODY REPAIRS ARE SOLD"	5
9 	10 BETTER LIGHTING WEEK	11 "FOR SAFE DRIVING AT NIGHTS BE SURE TO CHECK THE LIGHTS"	12
16 	17 CAR CHASSIS WEEK	18 "YOUR CAR CAN RUN SMOOTH & SASSY BY REPAIRING PARTS ON CHASSIS"	19
23 	24 CAR TUNE-UP WEEK	25 "GET TOP MILEAGE FROM CAR BY TUNING ENGINE UP TO PAR"	26
30			

MERCHANDISING CALENDAR

Let Motor Age's MERCHANDISING CALENDAR WORK FOR YOU

NAMES OF EMPLOYEES							
\$ales							Week's \$ales
\$ervice							
\$core							
\$heet							
First Week							
Second Week							
Third Week							
Fourth Week							
Total Monthly \$ales							

THURS.	FRI.	SAT.
6	7	8 1
<ul style="list-style-type: none"> ✓ Check body & fender for dents & scratches. ✓ Check grilles & bumpers for rust. ✓ Check for glass discoloration & cracks. ✓ Check car interior, floor mats & seat covers. ✓ Check on need for clean-up & polish jobs. 		
13	14	15
<ul style="list-style-type: none"> ✓ Check headlight candlepower & focus. ✓ Check dashlights, clock, radio & ignition switch. ✓ Check license plate light & back-up lights. ✓ Check trunk lights & dome lights. ✓ Check parking & turn signal lights. 		
20	21	22
<ul style="list-style-type: none"> ✓ Check springs & shackles. ✓ Check exhaust & muffler system. ✓ Check shock absorbers. ✓ Check front end for wear & alignment. ✓ Check condition of tires. 		
27	28	29
<ul style="list-style-type: none"> ✓ Check spark plugs & ignition wires. ✓ Check distributors & point gap. ✓ Check ignition timing & compression. ✓ Check fuel pump pressure. ✓ Check, clean & adjust carburetor. 		

CALENDAR REPRINTS NOW AVAILABLE

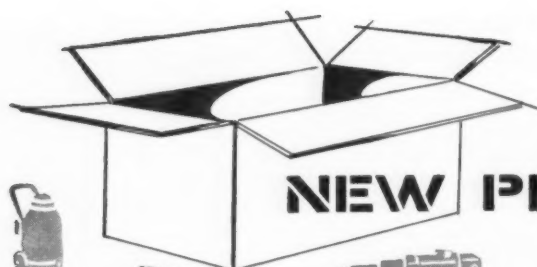
Motor Age's Merchandising Calendar available in reprint form on request, at no cost to you. The Calendar is double size and is on special paper. This offer is limited to thirty days after publication.

Send for your free Merchandising Calendar NOW!!

Write to the Editor of Motor Age, Chestnut & 56th Sts., Phila. 39, Pa.

HOW TO USE MERCHANDISING CALENDAR

When you receive your Calendar reprint, hang it in a prominent spot in your shop or service station. Place your employees' names in the \$core \$heet. Then hold an informal sales and service contest. See who gets the highest sales score at the end of the month, by promoting sales and services mentioned in the check lists. As an incentive, offer a prize to the winner.



NEW PRODUCTS

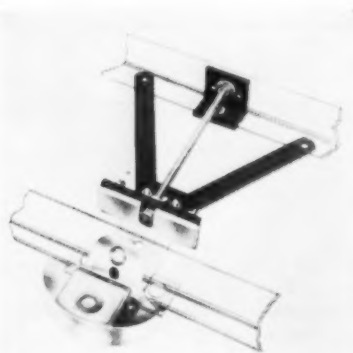
SHOW WINDOW



320. Car Wash Units

Choldun Mfg. Corp: Two new car washers (motor pump or air) have been unveiled for service stations. Using a new chemical formulation, they're designed for ten minute operation. Process involves twice spraying the car, then rinsing. Surfaces with tar, other unsightly film, may have to be mitted. The company claims the air unit will

operate with 120-130-lb pressure. Both units hold 100 gallons of the chemical. This reportedly allows 20 cars to be washed at a chemical cost of 10 cents per car.



321. Trailer Hitch

Independent Iron Works: Just out is a universal trailer hitch for all U.S. cars spanning 1948 through 1958. Name: "Baker Tow-King." It eliminates the problem of stocking 50 or 60 hitches to meet consumer demand. The dealer's investment, company claims, will be measurably reduced. The hitch has undergone extensive testing. Results reportedly show it will accommodate trailers weighing up to five tons.

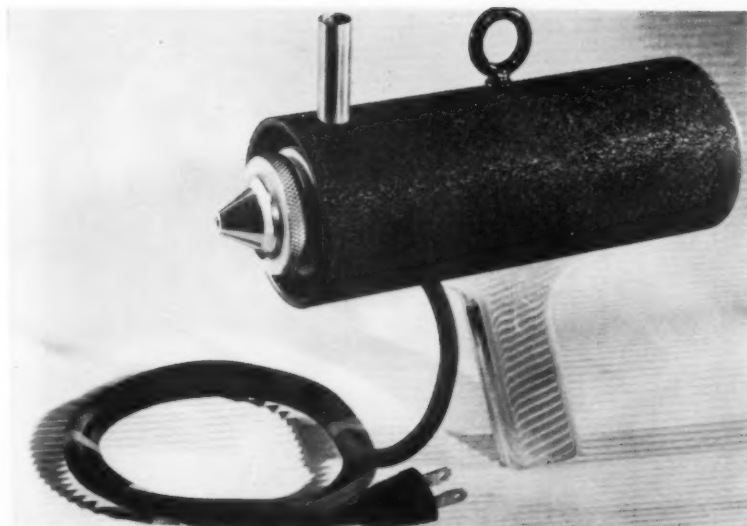


322. New Safety Tire

United States Rubber Company: Announced development of a low profile passenger car tire for increased safety. Entitled "Low Profile U.S. Royal Master," it's oval-shaped in cross section, wider than it is high. Company engineers claim it gives 60 per cent more mileage than current first line tires. On a 15-in. wheel it lowers a car's height as much as a conventional tire on a 14-in. wheel. Company reports it resists skids, punctures.

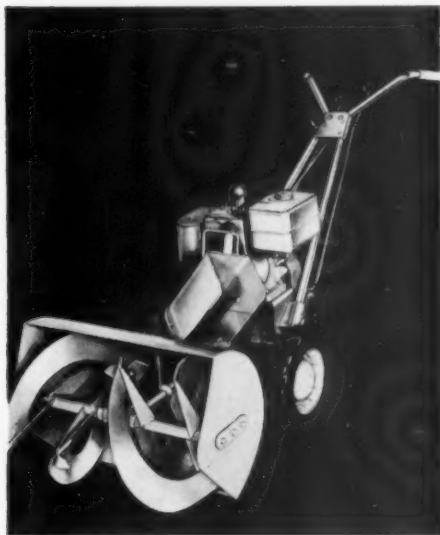
323. Lead Spraying Gun

Leadit Mfg. Company: A lead spraying gun has been marketed, designed to reduce labor cost and slice body repair time. It uses no flame, won't distort or buckle metal. Company claims it prevents rust, corrosion, peeling of lead and paint. Powered by electricity, it works close to glass without heat damage. Also will not disturb under-coating, sound deadening materials. It's offered in two models: Four, using 1/4-in. lead bars and Five, using 3/8-in. lead bars. A lifetime warranty is also given.



324. Snow Remover

George Garden Tools: A power snow remover that uses snow to help pull it is available for service stations. Name: "Snow Bird." Company claims it won't stall, that self-cleaning blades prevent snow from clogging hopper or ejection chute. It has a 2 3/4 hp engine with recoil starter, enclosed transmission, two clutches, adjustable starter blades, carburetor heater.



325. Dustless Sander

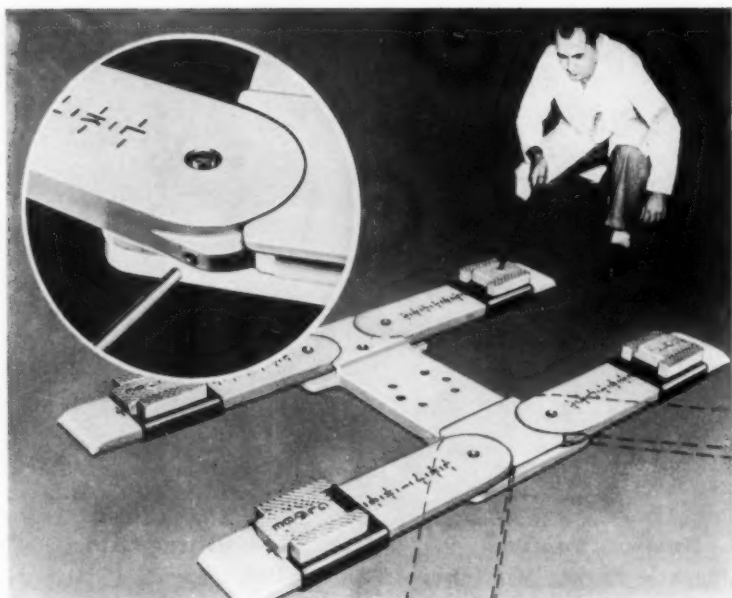
▼ **Black & Decker Mfg. Company:** Announced a 3-in. heavy duty belt sander providing dustless sanding. Company claims it's suited to both synthetic resin and lead methods. It attaches to any industrial or domestic vacuum cleaner, sands where painting is being done. Using a special motor, it sands 160 surface feet per minute, requires no lubrication.



326. New Battery

Auto-O-Cell Company: Attempting to overcome the problem of stocking many batteries, a new unit has been produced to reduce inventory 88 per cent. It has two sizes of individual cells. These combine into 6 and 12 volt, standard or heavy duty batteries. Company says they replace 19 different sizes used by cars, trucks.

(Continued on page 68)



327. Lifts All Autos

▲ **Globe Hoist Company:** A "Frame-Kontakt" hoist is available with pre-set adjustability. Mechanics can pre-set swivel arms, sliding contact pads before raising cars. According to the company, a basic universal adjustment will accommodate more than 90 per cent of present cars. The hoist's superstructure has four 31-in. long swivel arms. These attach to the cross-member by a tongue-in-groove, swivel connection. It provides an 87-in. reach, 78-in. width adjustment. Company claims it will handle U. S. and foreign cars, panel and pickup trucks.

328. All Driveshafts

Bear Mfg. Company: Announced a driveshaft balancer for all driveshafts. It will accommodate a 90-in. length between work supports. Designed for car, bus and truck driveshafts, it will also handle any that can adapt to its master accessories and weight capacity. Range is listed at 0 to 3000 rpm.

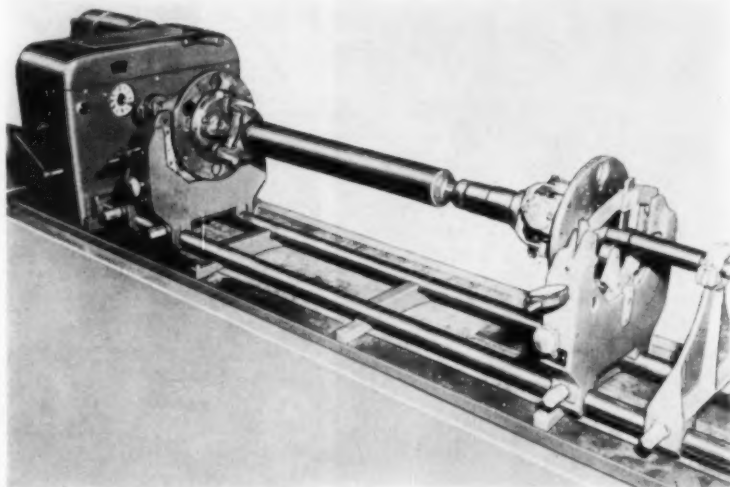
329. Restores Colors

The DeVilbiss Company: Remote cup spray equipment is offered for interior reconditioning of used cars. Both cloth and vinyl-type upholstery can be renewed, also faded colors restored, head and side linings refreshed, floor mats resurfaced, trunk, engine compartments freshened. Cup and gun are easily cleaned.

330. Testing Device

▲ **Polyphase Instrument Company:** To analyze engine and combustion characteristics of fuels used by internal combustion engines, a pressure sensitizer tester is available. Above is application with a standard spark plug. Sensitizer hooked to oscilloscope reveals ignition, other pulsations.

(Continued on page 70)



You Are Qualified to be a Member Of The Automotive Service League

This is a new and unusual organization open to all automotive service shops which have been qualified by Motor Age. If you haven't done so before, detach and return the postage free postcard below.

[The second and lower postcard is for more new product information.]



**FOR
LEAGUE
MEMBER-
SHIP**

Please Note!
When filling out cards—
be sure to sign your
Name and Address!

**FOR
NEW
PRODUCTS**

To MOTOR AGE

Please send me our membership plaque in the AUTOMOTIVE SERVICE LEAGUE.

We operate a
(check one)

☐ Car Dealership
☐ Repair Shop

☐ Service Station
☐ Specialty Shop

There are full time mechanics at our location.

Your Company

Your Name Your Title

Address
(Street & No.) (City) (Zone) (State)

Frank P. Tighe, EDITOR MOTOR AGE
P.O. Box 102, Village Station, N. Y. 14, N. Y.

10/58

Please send me further information on the New Products, the code numbers of which I have circled below. (Be sure to circle the code number).

320	321	322	323	324	325	326	327	328	329
330	331	332	333	334	335	336	337	338	339
340	341	342	343	344	345	346	347	348	349
350	351	352	353	354	355	356	357	358	359
360	361	362	363	364	365	366	367	368	369
370	371	372	373	374	375	376	377	378	379
380	381	382	383	384	385	386	387	388	389
390	391	392	393	394	395	396	397	398	399

[Postcard valid for 90 days only.]

Your Name Your Title

Your Company

Your Business: Wholesaler Repair Shop Car Dealer

Address
(Street & No.) (City) (Zone) (State)

New Literature

331. Mufflers, Pipes

The AP Parts Corp.: A catalog of muffler and pipe information is being distributed. Created primarily for dealers, the 52-page catalog provides listings for passenger cars and light trucks, including 1958 models. Features include sales information, dual installation tips and a muffler profit story; also the company's muffler specialist program and "A" Board.

332. Muffler Data

Merit Mufflers: Just out is

a 12-page booklet of market, profit, product and merchandising information. The company claims it will serve a dual purpose: wholesaler salesmen will find it useful when calling on dealers; for their part, dealers can use it to explain muffler corrosion to motorists. The booklet also doubles as a catalog, permitting dealers to order merchandising aids.

333. Selection Guide

Flexonics Corp.: An 8-page selection guide for hydraulic brake hose is available. It contains the company's "Flexon" part numbers for all autos;

also an application chart, brake hose interchange chart and coupling specification chart.

334. Filter Sales Aid

Wix Corp.: A cross-reference chart of oil, air, fuel filters is available for dealers. It lists 243 different filter, replacement cartridges of 14 manufacturers. The red and black chart measures 22 by 36 in., wipes clean with a damp cloth.

335. Lighting, Safety

R. E. Dietz & Company: The company's automotive lighting and safety equipment are presented in an illustrated catalog. Pictures, dimensions and specifications are offered of these items: turn signals, mirrors, stop lights, clearance and marker lights, flare kits, extinguishers, searchlights, spotlights and foglights. The list applies to automobiles, trucks, buses and tractors.

336. Auto Finish Chart

E. I. Du Pont De Nemours & Company: Questions of automobile finish and its care are answered in a wall chart, developed for car owners and the trade. It's laid out in three sections. First explains automotive finishes, distinguishes between lacquer and enamel, specifies finishes employed by various manufacturers. Second section explains deterioration, why some conditions require frequent cleaning. Third reveals how to remove stains, restore lustre. Also lists waxes, polishes and cleaners.

337. Display Card

Universal Lubricating Systems, Inc.: Aimed at coupler turnover, a display card (8 x 13-in.) is offered of "Grip Seal" lube couplers. It provides 12 couplers.

(Continued on page 104)

FIRST CLASS
PERMIT No. 18
Philadelphia, Pa.

BUSINESS REPLY CARD

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POSTAGE WILL BE PAID BY

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New York, N. Y.

BUSINESS REPLY CARD

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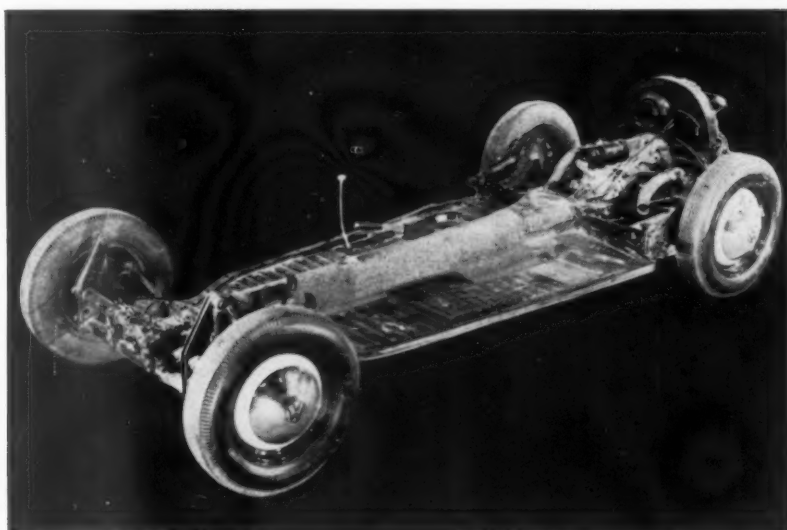
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Chilton's MOTOR AGE

P. O. Box 102,
Village Station,
New York 14, N. Y.

Readers Service Dept.

Volkswagen chassis
before sports car
body is bolted on.



"Bolt-on" Sports Car Body for VOLKSWAGEN Chassis

NEWEST introduction in the automotive industry is the bolt-on or replacement car body. This body is generally built from reinforced fiberglass plastic. Replacement builders do not construct entire cars. They create body designs which will adapt to the chassis and engine combinations built by automotive companies.

One such bolt-on body is the Alken D-2. This is a sports car body built exclusively for the Volkswagen chassis. Builder of this body is the Alken Corporation of Venice, California. It is sold assembled and ready for installation.

The D-2 body is modern, following the popular sculptured lines of today's automobile. The lines are low and long. Inside the cockpit is a roominess not always associated

(Continued on page 92)

*Alken D-2 fiberglass body
is pre-assembled and easily
installed on VW chassis*

Alken D-2 sports car shown next to VW sedan, which provides the chassis for the "bolt on."





Merchandising Story of the Month

Sell Cooling System Service

*Basic cooling system service checks will bring
in additional sales and services . . . check now!*

OLD Man Winter is just around the corner. Get the jump on him this month by promoting your anti-freeze campaign and cooling system service now. Newspaper advertising and flyers can bring in a lot of profitable business. They remind the public of the nearness of winter and the need for a cooling system check-up.

When a customer comes in for his anti-freeze ask permission to make a thorough inspection of his car's cooling system. Point out that a good cooling system check-up can be just as important in restoring top performance and economy in his car as a carbon and valve job.

These services can be performed anywhere in your shop or service station. Several jobs

By William M. Montgomery, Associate Editor

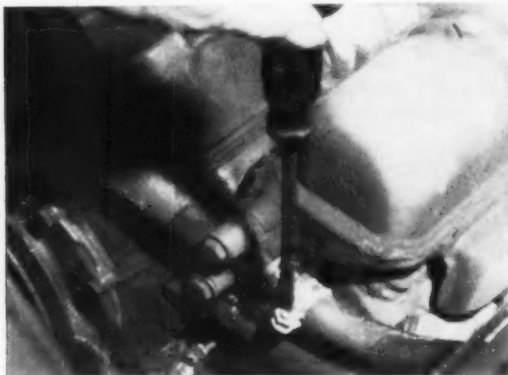
can be lined up at one time. One man can drain and flush a radiator and block. Another man can add anti-freeze.

Here is the basic cooling system service package. There will be many opportunities for additional sales of replacement items when your inspection of the cooling system is over. Many cars will need new radiator caps, hoses, fan belts, clamps and many other items to make them safe for winter driving.

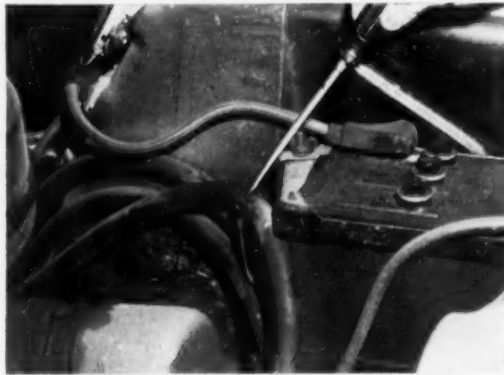
First thing to do is to drain and flush out the cooling system. To avoid corrosive engine damage be sure that the petcocks on the sides of the block are also opened. This will

(Continued on page 100)

Check & tighten all hose clamps & replace worn ones.

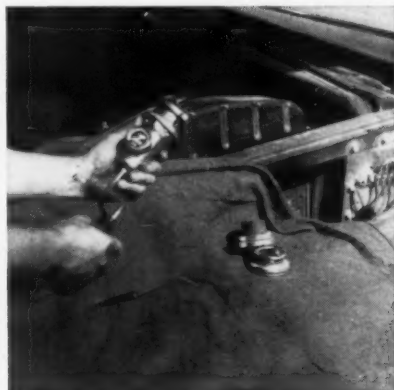


Inspect condition of rubber hoses. Replace, if worn.





Serviceman shown checking customer's car for leaks in radiator and hoses.



Above: Tester is used to uncover leaks in radiator and to check condition of radiator cap.



Upper left: Fan belt of car should be checked for tension and for signs of wear. Replace, if worn.

Left: Mechanic shows customer a defective radiator cap and worn fan belt. These were uncovered in a cooling system check.



Dodie Marshall, New York model, has been elected "Miss Anti-Freeze of 1958." She is a symbol of Anti-Freeze Week, a Du Pont promotion. Anti-Freeze Week began in the central part of country, Oct. 13-19. In the northern states, Sept. 22-28. In the south, it will run Oct. 27 to Nov. 2.

HUMAN EVENTS



Shown clasping hands are General Motor's outgoing and incoming officers. Left to right is Harlow H. Curtice, retiring president and chief executive officer; Frederick G. Donner, new chairman of the board and chief executive officer; Albert Bradley, retiring chairman of the board and John F. Gordon, GM's new president and chief operating officer.

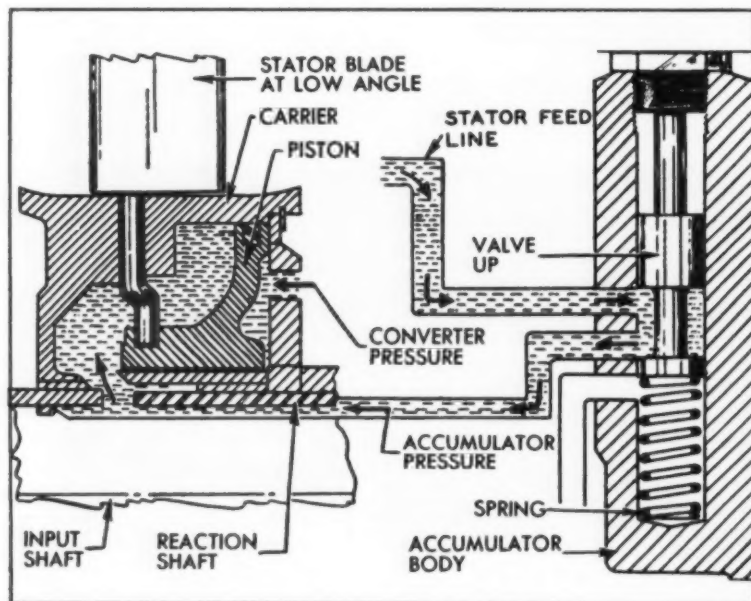


Cool, man, real cool. That's what we thought when we saw this bevy of beauties perched on top of an ice-covered "Edsicle." This 1958 four-door Edsel Citation was tested at sub-zero temperatures in Ford's research and engineering center in Dearborn, Mich.

Ford's low and sleek Thunderbird for '59 is shown at right. Styling and mechanical features reveal many refinements. The 430-cu. in. OHV-V-8 engine is available as optional equipment.



Byron J. Nichols, group vice president — automotive sales, Chrysler Corporation, shows off the imported French Simca two-door hard-top Aronde model. Chrysler has set its sales sights on 15 per cent of the imported car market for 1959.



Stator in Low Angle Position

1956 Buick Has Transmission Trouble

We have a 1956 Buick giving us transmission trouble. The variable pitch does not work when accelerator is floored. What would cause a condition like that?

Berts Garage,
Philadelphia, Pennsylvania

IF the transmission operates ok otherwise, the trouble is probably due to the stator con-

trol valve being stuck. Remove the accumulator to free up the valve.

1954 Nash Has Brake Troubles

I have a 1954 Nash Canadian Statesman, which I have trouble getting good brakes on the front wheels. I have put in a new master cylinder, all new rubbers in wheel cylinders. I've cleaned them all out and have blown the

lines all clear. It seems to hold better in reverse than forward. The drums have been turned. I am at a loss as to what to do next. Can you help me?

E. H. Cook
New Westminster, B.C.
Canada

I WOULD suggest checking the primary and secondary spring tension. Install the weakest ones on the front shoe. Also make sure the shoes are installed correctly. The shortest lining should be on the front.

Procedure For Removing A Pontiac Oil Pan

I would like information on removal of the oil pan on a 1951-8 cyl. Pontiac with automatic transmission. I cannot seem to quite do the job or clear the starting gear attached to the fly-wheel without injuring the gasket. My procedure has been to jack up the front about six inches for working room, loosening the steering rod and setting first piston for clearance. Have also jacked up transmission to some degree, but all of this does not seem to be sufficient to remove pan.

G. E. Hueni
2525 Odell Ave.
Casper, Wyoming

for troubleshooting



DRAIN crankcase and radiator and remove radiator hoses from water pump and cylinder head. Remove two bolts holding idler arm to allow arm to drop down for clearance. Remove front cross member to radiator cross member apron. Remove two self-locking nuts holding front insulator to engine support. Place a wooden block between the jack and oil pan. Raise the engine about 1 inch above insulator and then remove the two bolts holding front insulator and rebound clamp to frame and remove insulator and clamp. It is not necessary to remove the mount from the frame, but by doing so more clearance is provided for reaching the front pan cap screws. Place a block 2½ inches high between

the frame and engine support and lower engine so it rests securely on the block. Remove flywheel housing lower cover. Remove the oil pan. In some cases it may be necessary to remove one of the engine side aprons to give sufficient clearance for removing pan.

1940 Plymouth Overheats At Speeds Above 40 mph

I have a problem with a 1940 P-10 Plymouth. When spring comes and the temperature rises above 60 degrees F., the temperature of this car goes up to 180 degrees F. It will hold steady if the car is not driven any faster than 40 miles per hour. Just as soon as you step up the speed above 40 m.p.h. the temperature will climb. When you stop, water will go out the overflow pipe, and when you go again, it will get hotter as the volume of water gets less.

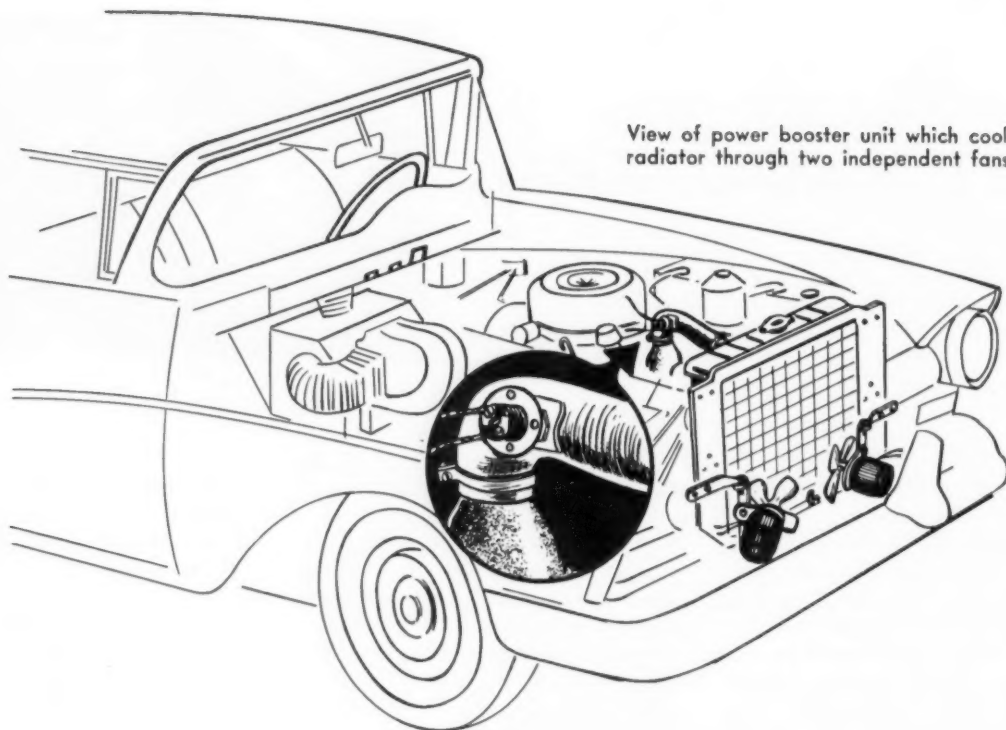
To correct this situation we cooked out the block and radiator, installed new water pump and a tube through the block, set ignition timing on top dead center by an analyzer, removed the thermostat, had new hoses installed, removed head, and had it resurfaced and installed

a new gasket. I made a compression test on all the cylinders and they are all equal. After all these things, it still heats up as before.

*Benjamin S. Haverstick
Haverstick's Garage
Columbia, Pa.*

YOU have done just about everything I can think of to cure this condition. About the only suggestion I can add is to check the exhaust system for obstructions. I have seen cases where kinked pipes or the muffler clogged with carbon caused the over heating. I would check these items very carefully. Another possibility would be a small crack in the cylinder head which leaks when engine is under a load.





View of power booster unit which cools radiator through two independent fans.

Power Booster Aims at Increased Horsepower

Here are facts on the power booster. This unit aims at by-passing use of engine fan to increase horsepower

A technical innovation in recent months that aims at by-passing the use of the engine fan to increase horsepower is being offered by a Chicago manufacturer.

The firm reports that its unit has found favor with sports car or hot rod enthusiasts. Now is catching on with regular car owners.

Known as the Everkool power booster, the unit's basic principle is quite simple: To have a mechanically-induced draft of air blown over the radiator only when the car's engine is idling or when creeping along in heavy traffic.

The power booster cools the radiator (when needed) through two independent fans. These are powered by electric motors;

(Continued on page 102)



LEE

*again proves
engineering leadership
with a new concept in
oil filters!*

[please turn page]

LEE proudly presents the new...

Completely New **Resin-weld®**
ONE-PIECE-CONSTRUCTION
OIL FILTER

* **THE ONLY FILTER THAT COMPLETELY
REMOVES BOTH SLUDGE AND ACID!**

New! BUILT-IN NEOPRENE CENTER POST SEALS!

New! MULTI-FLOW PERFORATED CENTER TUBE OUTLET!

New! TOP AND BOTTOM ELECTROLYTIC FINISH STEEL CAPS!

New! ELECTROLYTIC STEEL FINISHED SHELL! NO PAINT
TO DISSOLVE AND CONTAMINATE THE OIL!

New! FULL-FLOW UNRESTRICTED BODY SHELL AND TUBE
WITH AS MANY AS 3,000 INLET AND OUTLET APERTURES!

New! HEAT-TREATED AND CURED ACCORDION-PLEATED,
RESIN-IMPREGNATED, FULL-FLOW ELEMENT!

New! FERIDIUM® ANTI-ACID ANODE CATALYST!

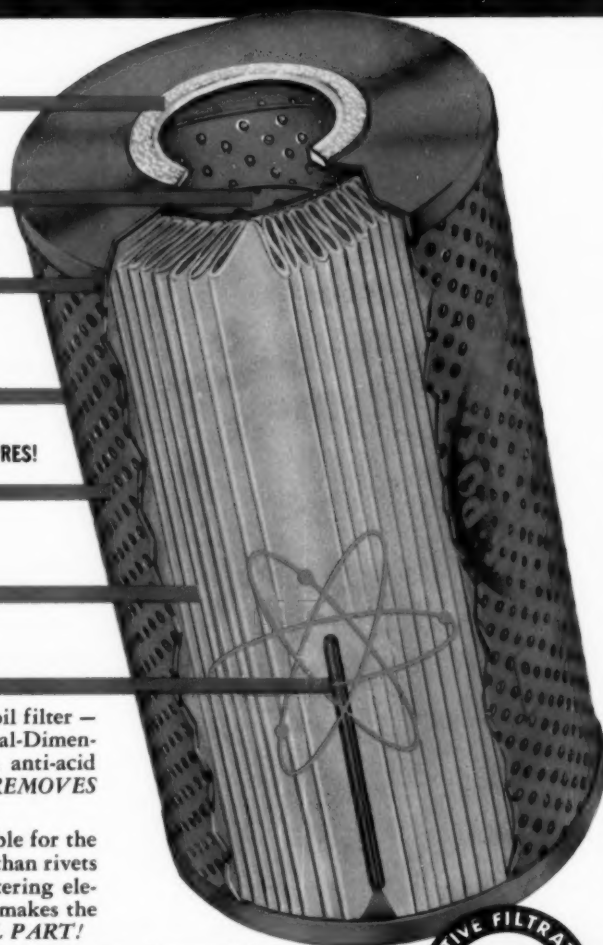
LEE FILTER has done it again with an entirely new kind of oil filter — the LEE Monolithic (one-piece) Resin-weld® Filter with Dual-Dimension filtration — full-flow oil filtration PLUS electrolytic, anti-acid Feridium® filtration. **IT'S THE ONLY FILTER THAT REMOVES BOTH SLUDGE AND ACID!**

Exclusive resin-welding of all filter components makes possible for the first time an irreversible thermo-setting grip, more powerful than rivets or other metal fastening devices. The heated and cured filtering element is bonded or welded in the process. This LEE process makes the Resin-weld® Filter look like what it is — **A FUNCTIONAL PART!**

The LEE Resin-weld® Filter is produced with pre-determined filtering characteristics thereby insuring positive, predictable performance. Filter-failure caused by collapse, bypass and channelling of the contaminants has been completely eliminated!

LEE Resin-weld® Filters conform to functional standards set by SAE, U. S. Army Procurement, Fort Belvoir Research and Development and initial equipment requirements of car manufacturers. Write for Catalog!

* PATENTS PENDING



ADVERTISED IN
LIFE



LEE FILTER CORP. 41 River Road, North Arlington, New Jersey

1958 Tune-up—Alignment Specifications

MAKE AND MODEL	ENGINE	No. of Cylinders Bore and Stroke (In.)	Maximum Brake H.P.	TUNE-UP DATA										FRONT END ALIGNMENT			
				VALVES				IGNITION				Steering Axis Inclination (Deg.)	Caster (Deg.)	Camber (Deg.)	Toe-In (In.)		
				Seat Angle		Operating Tappet Clearance		Breaker Point Gap (In.)	Cam Angle (Deg.)	Spark Plug Gap (In.)	Spark Occurs T. C.						
				Inlet (Deg.)	Exhaust (Deg.)	Inlet (In.)	Exhaust (In.)										
AMERICAN MOTORS CORP.																	
Rambler.....	8-5801	6-3 1/2 x 4 1/4	90	ACA-14	45	45	.016C	.016C	.016	32	.035	3B	8	1/4 N to 1/4 P	0 to 1/2 P	1/4 to 1/4	
	8-5810	6 3/4 x 4 1/4	127	CA-14	45	45	.012H	.016H	.016	32	.035	5B	6 11'	0 to 1/2 P	1/4 N to 1/4 P	1/4 to 1/4	
	8-5820	8 3/4 x 3 1/2	215	CA-14	30	45	.012H	.014H	.016	30	.035	5B	6 11'	0 to 1/2 P	1/4 N to 1/4 P	1/4 to 1/4	
	8-5880	8-4x3 1/2	270	CA-14	30	45	Hyd	Hyd	.016	30	.035	5B	6 11'	0 to 1/2 P	1/4 N to 1/4 P	1/4 to 1/4	
CHRYSLER CORP.																	
Chrysler.....	8-LC1-L	8-3 1/2 x 3 3/8	290	AL-14	45	45	Hyd	Hyd	.017	30	.035	6B	8 1/2	0 to 1 1/2 N	0 to 1 1/2 P	1/4 to 1/4	
	8-LC2-M	8-3 1/2 x 3 3/8	310	AL-14	45	45	Hyd	Hyd	.017	30	.035	6B	8 1/2	1/4 N to 1/4 P	0 to 1 1/2 P	1/4 to 1/4	
	8-LC3-H	8-4x3 1/2	345	AL-14	45	45	Hyd	Hyd	.017	38	.035	6B	8 1/2	1/4 N to 1/4 P	0 to 1 1/2 P	1/4 to 1/4	
	8-LC3-S	8-4x3 1/2	380	AL-14	45	45	.015H	.024H	.017	38	.035	6B	8 1/2	1/4 N to 1/4 P	0 to 1 1/2 P	1/4 to 1/4	
De Soto.....	8-LS1-L	8-4 1/4 x 3 3/8	280	AL-14	45	45	Hyd	Hyd	.017	30	.035	6B	6 1/2	0 to 1 1/2 N	0 to 1 1/2 P	1/4 to 1/4	
	8-LS2-M	8-4 1/4 x 3 3/8	295	AL-14	45	45	Hyd	Hyd	.017	30	.035	6B	6 1/2	0 to 1 1/2 N	0 to 1 1/2 P	1/4 to 1/4	
	8-LS3-H	8-4 1/4 x 3 3/8	305	AL-14	45	45	Hyd	Hyd	.017	30	.035	6B	6 1/2	0 to 1 1/2 N	0 to 1 1/2 P	1/4 to 1/4	
	8-LS3-S	8-4 1/4 x 3 3/8	345	AL-14	45	45	Hyd	Hyd	.017	38	.035	6B	6 1/2	0 to 1 1/2 N	0 to 1 1/2 P	1/4 to 1/4	
Dodge.....	8-LD1-L1, LD1-L2	8-3 1/2 x 3 3/8	138	AL-14	45	45	.010H	.010H	.020	39	.035	2B	6 1/2	0 to 1 1/2 N	0 to 1 1/2 P	1/4 to 1/4	
	8-LD2-L1, LD2-L2	8-3 1/2 x 3 3/8	252	AL-14	45	45	Hyd	Hyd	.017	30	.035	6B	6 1/2	0 to 1 1/2 P	0 to 1 1/2 P	1/4 to 1/4	
	8-LD2-M	8-3 1/2 x 3 3/8	265	AL-14	45	45	Hyd	Hyd	.017	30	.035	6B	6 1/2	0 to 1 1/2 P	0 to 1 1/2 P	1/4 to 1/4	
	8-LD3-L, LD3-H	8-4 1/4 x 3 3/8	295	AL-14	45	45	Hyd	Hyd	.017	30	.035	6B	6 1/2	0 to 1 1/2 P	0 to 1 1/2 P	1/4 to 1/4	
	8-LD2 & LD3, D-500 Package	8-4 1/4 x 3 3/8	305	AL-14	45	45	Hyd	Hyd	.017	30	.035	6B	6 1/2	0 to 1 1/2 P	0 to 1 1/2 P	1/4 to 1/4	
Imperial.....	8-LY1-L, LY1-M, LY1-H	8-4x3 1/2	345	AL-14	45	45	Hyd	Hyd	.017	38	.035	6B	8 1/2	0 to 1 1/2 P	0 to 1 1/2 P	1/4 to 1/4	
Plymouth.....	8-LP1-L, LP1-M, LP1-H	8-3 1/2 x 3 3/8	132	AL-14	45	45	.010H	.010H	.020	39	.035	2B	6 1/2	0 to 1 1/2 N	0 to 1 1/2 P	1/4 to 1/4	
	8-LP2-L, LP2-M, LP2-H	8-3 1/2 x 3 3/8	225	AL-14	45	45	.012H	.018H	.017	30	.035	10B	6 1/2	0 to 1 1/2 N	0 to 1 1/2 P	1/4 to 1/4	
	8-LP2-H Fury	8-3 1/2 x 3 3/8	290	AL-14	45	45	.012H	.018H	.017	38	.035	10B	6 1/2	0 to 1 1/2 N	0 to 1 1/2 P	1/4 to 1/4	
	Golden Commando Package	8-4 1/4 x 3 3/8	305	AL-14	45	45	Hyd	Hyd	.017	38	.035	8B	6 1/2	0 to 1 1/2 N	0 to 1 1/2 P	1/4 to 1/4	
FORD MOTOR CO.																	
Edsel.....	8-57A, B; 58A, B; 63A, B; 64A, 78B	8-4 1/4 x 3 1/2	303	Ch-18	30	45	Hyd	Hyd	.015	27	.034	7B	7	0 to 1 P	1/2 P to 1 P	1/4 to 1/4	
	8-57A, 57B, 63A, 63B, 78B	8-4 1/4 x 3 1/2	345	Ch-18	30	45	Hyd	Hyd	.015	27	.034	7B	7	0 to 1 1/2 P	0 to 1 1/2 P	1/4 to 1/4	
Ford.....	8-All	8-3 1/2 x 3 1/2	145	Ch-18	45 1/2	45 1/2	.019H	.019H	.025	37	.034	4B	7 7'	1/2 P to 1 1/2 P	1/2 P to 1 1/2 P	1/4 to 1/4	
	8-Custom 300, Fairlane	8-3 1/2 x 3 1/2	205	Ch-18	45 1/2	45 1/2	.019H	.019H	.015	27	.034	3B	7 7'	1/2 P to 1 1/2 P	1/2 P to 1 1/2 P	1/4 to 1/4	
	8-Fairlane 500	8-4x3 1/2	265	Ch-18	60 1/2	45 1/2	.026H	.026H	.015	27	.034	3B	7 7'	1/2 P to 1 1/2 P	1/2 P to 1 1/2 P	1/4 to 1/4	
	8-Fairlane 500 Option	8-4x3 1/2	300	Ch-18	60 1/2	45 1/2	.026H	.026H	.015	27	.034	3B	7 7'	1/2 P to 1 1/2 P	1/2 P to 1 1/2 P	1/4 to 1/4	
	8-Thunderbird	8-4x3 1/2	300	Ch-18	60 1/2	45 1/2	.025H	.025H	.015	27	.034	4B	7 7'	1/2 P to 1 1/2 P	1/2 P to 1 1/2 P	1/4 to 1/4	
Lincoln.....	8-All	8-4 1/2 x 3 1/2	375	Ch-18	29 1/2	44 1/2	Hyd	Hyd	.015	27	.032	6B	7 28' 10"	0 to 1 1/2 N	0 to 1 1/2 P	1/4 to 1/4	
Mercury.....	8-Montgomery	8-4 1/2 x 3 1/2	312	Ch-18	60 1/2	45 1/2	Hyd	Hyd	.015	27	.034	4B	7	1/2 N to 2N	1/2 N to 1 1/2 N	1/4 to 1/4	
	8-Montclair	8-4 1/2 x 3 1/2	330	Ch-18	60 1/2	45 1/2	Hyd	Hyd	.015	27	.034	4B	7	1/2 N to 2N	1/2 N to 1 1/2 N	1/4 to 1/4	
	8-Park Lane	8-4 1/2 x 3 1/2	380	Ch-18	60 1/2	45 1/2	Hyd	Hyd	.015	27	.034	7B	7	1/2 N to 2N	1/2 N to 1 1/2 N	1/4 to 1/4	
GENERAL MOTORS CORP.																	
Buick.....	8-40	8-4 1/2 x 3 1/2	250	AC-14	45	45	Hyd	Hyd	.015	30	.033	5B	7	1/2 N	1/2 P	1/4 to 1/4	
	8-50, 60, 70, 700	8-4 1/2 x 3 1/2	300	AC-14	45	45	Hyd	Hyd	.015	30	.033	5B	7	1/2 N	1/2 P	1/4 to 1/4	
Cadillac.....	8-40, 62, 75	8-4x3 1/2	310 1/2	AC-14	44	44	Hyd	Hyd	.016	30	.035	5B	4	1/2 N to 1 1/2 N	1/2 N to 1 1/2 P	1/4 to 1/4	
Chevrolet.....	8-1100, 1500, 1700	8-3 1/2 x 3 1/2	145	AC-14	31	46	Hyd	Hyd	.019	30	.035	TC	7 3/4	1/2 N to 1 1/2 P	0 to 1 P	1/4 to 1/4	
	8-1200, 1600, 1800	8-3 1/2 x 3 1/2	185	AC-14	45	45	Hyd	Hyd	.019	30	.035	4B	7 3/4	1/2 N to 1 1/2 P	0 to 1 P	1/4 to 1/4	
	8-1200, 1600, 1800	8-4 1/2 x 3 1/2	250	AC-14	45	45	Hyd	Hyd	.019	30	.035	4B	7 3/4	1/2 N to 1 1/2 P	0 to 1 P	1/4 to 1/4	
	8-967	8-3 1/2 x 3 1/2	230	AC-14	45	45	Hyd	Hyd	.018	29	.035	4B	4	2 1/4 P	0 to 1 P	0 to 1/4	
Oldsmobile.....	8-98	8-4x3 1/2	265	AC-14	45	45	Hyd	Hyd	.016	30	.030	5B	7	0 to 1N	1/2 N to 1 1/2 P	0 to 1/4	
	8-588, 96	8-4x3 1/2	305	AC-14	45	45	Hyd	Hyd	.016	30	.030	5B	7	0 to 1N	1/2 N to 1 1/2 P	0 to 1/4	
Pontiac.....	8-55-25, 59-27, 55-28	8-4 1/2 x 3 1/2	240	AC-14	30	45	Hyd	Hyd	.016	30	.036	6B	4 1/2	0 to 1N	0 to 1 P	0 to 1/4	
	8-55-25, 59-27, 55-28	8-4 1/2 x 3 1/2	255	AC-14	30	45	Hyd	Hyd	.016	30	.036	6B	4 1/2	0 to 1N	0 to 1 P	0 to 1/4	
STUDEBAKER-PACKARD CORP.																	
Packard.....	8-58L	8-3 1/2 x 3 1/2	225	Ch-14	45	45	.024H	.024H	.016	31	.036	4B	6	1N to 2 1/2 N	0 to 1 P	1/4 to 1/4	
	8-58L-K	8-3 1/2 x 3 1/2	275	Ch-14	45	45	.024H	.024H	.016	31	.036	4B	6	1N to 2 1/2 N	0 to 1 P	1/4 to 1/4	
Studebaker.....	8-59G	8-3 1/2 x 3 1/2	181	Ch-14	45	45	.016C	.016C	.020	39	.031	2B	6	1N to 2 1/2 N	0 to 1 P	1/4 to 1/4	
	8-59B	8-3 1/2 x 3 1/2	180	Ch-14	45	45	.024H	.024H	.016	31	.036	4B	6	1N to 2 1/2 N	1N to 1P	1/4 to 1/4	
	8-59H	8-3 1/2 x 3 1/2	225	Ch-14	45	45	.024H	.024H	.016	31	.036	4B	6	1N to 2 1/2 N	0 to 1 P	1/4 to 1/4	
	8-58H-K7	8-3 1/2 x 3 1/2	275	Ch-14	45	45	.024H	.024H	.016	31	.036	4B	6	1N to 2 1/2 N	0 to 1 P	1/4 to 1/4	

ABBREVIATIONS

1—Left only; right, 1/2 N to 1/4 P
2—Eldorado models, 335.

AC—A. C. Spark Plug Div.
ACA—Auto-Lite, Champion or A.C.
AL—Electric Auto-Lite Co.
B—Before top center.

C—Cold.
CA—Champion or Auto-Lite.
Ch—Champion Spark Plug Co.
H—Hot.

Hyd—Hydraulic valve lifters.
N—Negative.
P—Positive.
TC—Top center.

1958 New Passenger Car Registrations by Makes by States

STATE AND MONTH	Buick	Chrysler	Chrysler	De Soto	Dodge	Edsel	Ford	Imperial	Lincoln	Mercury	Oldsmobile	Packard	Plymouth	Pontiac	Rambler	Studebaker	Misc. Dom.	Foreign	Total	
Alabama	July 254	84	1435	48	33	109	26	1054	7	15	111	320	376	192	182	36	396	4,658		
7 Mos.	2329	704	10175	380	271	817	301	7686	81	139	897	2370	6	2534	1872	442	183	2076	33,471	
Arizona	July 84	66	688	33	16	55	32	425	8	20	94	155	4	214	88	91	10	1	262	2,364
7 Mos.	729	427	4430	178	106	366	190	2745	68	141	479	889	11	1152	702	574	89	1	1886	15,163
Arkansas	July 138	54	1066	20	18	60	20	742	5	9	79	203	3	229	155	99	29	1	134	3,072
7 Mos.	1181	439	6121	167	154	579	146	5296	33	84	632	1444	12	1594	1040	481	195	1	738	20,337
California	July 1003	1273	10733	407	288	1220	306	7519	159	235	1198	1534	17	3253	1347	1530	252	14	7232	39,507
7 Mos.	9741	9009	68472	3201	2352	8250	2243	51097	1251	2087	7084	12152	155	22007	10356	8000	1546	14	39197	258,222
Colorado	July 195	84	1300	53	31	152	27	849	13	13	149	219	2	294	159	258	20	1	445	4,224
7 Mos.	1373	620	8576	378	268	1905	398	923	93	178	1083	1711	13	2335	1351	1413	221	16	2475	29,354
Connecticut	July 162	147	1640	89	57	189	54	1326	18	30	172	376	5	630	291	387	7	4	5305	40,581
7 Mos.	1856	1136	9822	674	457	1188	382	7757	130	279	1034	2404	36	3968	1981	1951	395	16	95	1,827
Delaware	July 45	30	492	23	21	39	11	295	4	5	47	68	5	1129	481	225	63	1	612	9,686
7 Mos.	435	260	3044	152	125	241	86	1858	22	49	279	627	5	210	90	76	5	4	225	2,005
Dist. of Columbia	July 64	60	571	54	31	60	9	362	1	9	362	1	1370	666	303	59	25	1278	12,578	
7 Mos.	480	469	3409	273	167	424	41	2341	53	78	356	758	13	713	323	312	51	1	1400	9,525
Florida	July 383	361	2326	123	49	172	40	2064	28	69	278	534	2	6603	3407	2609	516	15	12433	89,525
7 Mos.	4750	3686	23745	909	739	1816	669	18425	427	880	2463	5395	38	527	292	183	24	6	684	6,391
Georgia	July 311	150	1903	60	51	143	18	1494	13	16	130	376	8	327	292	183	24	3	4369	53,778
7 Mos.	3030	1290	15897	537	382	1186	336	13273	109	228	1283	3691	38	4096	2979	1147	371	36	226	1,495
Idaho	July 84	38	372	15	12	44	16	263	5	6	40	70	1	874	673	664	155	10	978	10,477
7 Mos.	599	293	2460	138	98	323	131	1876	42	79	399	675	10	2189	1318	1332	281	28	1071	27,477
Illinois	July 1406	838	8949	319	257	550	150	5748	171	120	823	2002	19	5178	10523	7330	1907	266	5829	50,255
7 Mos.	13012	6452	59182	2697	2047	4350	1459	38503	671	1422	5758	15787	157	21812	10523	7330	1907	266	5829	50,255
Indiana	July 537	227	20754	963	897	2064	911	17020	271	456	2278	6490	121	6241	4012	2837	1624	31	2575	77,239
7 Mos.	5627	2167	13787	65	38	179	49	1556	12	17	248	456	2	3389	2672	1784	458	43	1134	46,278
Iowa	July 319	137	2062	65	38	179	49	1556	12	17	248	456	2	3389	2672	1784	458	43	1134	46,278
7 Mos.	2703	848	14174	545	386	1238	449	11492	92	166	1516	3196	14	641	300	286	76	3	283	6,443
Kansas	July 314	126	1901	71	60	183	57	1557	17	18	1236	2728	31	3301	2389	1564	396	17	1544	42,297
7 Mos.	2685	639	12330	519	423	1191	494	10320	102	130	130	300	2	386	184	114	33	4	141	3,842
Kentucky	July 215	86	1223	42	27	105	34	821	3	130	1021	2272	25	2430	1523	670	178	47	896	28,446
7 Mos.	1981	629	9079	309	222	712	326	6452	62	130	1021	2272	25	2430	1523	670	178	47	896	28,446
Louisiana	July 191	104	1774	37	30	91	37	1323	7	14	145	404	3	297	230	125	37	2	2203	4,016
7 Mos.	2202	895	14474	358	256	902	316	10717	96	209	1190	3217	12	2648	2266	1883	230	22	2203	4,016
Maine	July 54	34	477	10	14	49	8	394	4	30	67	102	12	1282	745	686	215	1	1382	14,702
7 Mos.	750	315	3838	139	145	471	100	3405	26	52	437	702	12	841	294	293	49	1	590	7,403
Maryland	July 285	143	2469	93	78	234	26	10310	152	183	1316	2758	26	3387	2484	1328	335	13	3247	50,255
7 Mos.	2458	1000	15669	739	585	1672	363	10310	152	183	1316	2758	26	3387	2484	1328	335	13	3247	50,255
Massachusetts	July 448	263	2965	134	118	311	47	2366	26	50	294	750	4	1154	498	875	67	87	6045	71,825
7 Mos.	3933	1965	17391	1007	917	2137	438	15311	222	453	1894	5253	42	7023	3154	4285	448	87	6045	71,825
Michigan	July 934	550	6489	222	235	604	199	5141	54	158	1091	1377	5	1900	958	863	115	1	995	21,990
7 Mos.	8741	4338	41910	1574	1606	4102	2134	32883	388	1093	6196	11659	59	11694	7811	5295	892	38	6303	149,016
Minnesota	July 548	217	2890	151	116	277	82	2407	31	36	379	652	43	5237	3575	2827	740	144	1741	61,398
7 Mos.	3823	1256	17453	811	664	1768	619	13607	179	298	1972	488	43	5237	3575	2827	740	144	1741	61,398
Mississippi	July 213	81	965	30	14	49	13	759	4	61	421	1426	6	1308	1063	366	171	5	738	18,086
7 Mos.	1449	382	6393	196	150	402	146	5112	46	61	421	1426	6	1308	1063	366	171	5	738	18,086
Missouri	July 463	216	3218	82	61	267	45	2277	20	33	252	517	4	834	448	328	87	4	509	9,684
7 Mos.	4195	1731	23179	706	785	2035	529	17311	200	323	1870	4761	41	8222	3714	1118	32	150	1,787	
Montana	July 719	253	2968	163	101	364	146	2484	44	73	403	728	7	334	201	158	33	4	193	3,615
7 Mos.	95	48	1173	51	19	95	13	867	7	9	116	108	1	334	201	158	33	4	193	3,615
Nebraska	July 1346	505	7944	309	152	656	165	6364	72	125	831	1638	19	1973	1352	822	226	55	949	25,501
7 Mos.	18	11	92	8	7	20	6	112	3	9	16	27	1	36	24	7	8	1	89	4,845
Nevada	July 167	180	1052	80	75	146	102	911	23	60	190	283	8	342	286	73	68	1	191	1,434
7 Mos.	167	180	1052	80	75	146	102	911	23	60	190	283	8	342	286	73	68	1	191	1,434
New Hampshire	July 49	29	362	11	2	60	27	1845	18	43	261	396	1	773	441	372	118	1	1152	9,132
7 Mos.	365	192	2462	100	60	270	42	1845	18	43	261	396	1	773	441	372	118	1	1152	9,132
New Jersey	July 814	531	4542	335	227	537	109	2792	70	100	504	1112	12	1928	738	664	140	1	8341	111,648
7 Mos.	6047	4182	26317	2454	1827	3861	1011	19389	599	813	3095	7816	99	12059	5743	3937	962	16	155	2,212
New Mexico	July 111	45	665	22	25	56	31	500	9	19	435	808	6	884	664	390	112	2	908	46,224
7 Mos.	742	252	3597	167	138	357	169	2434	51	79	1245	3187	24	3866	1735	1841	317	165	21405	263,107
New York	July 1849	1309	10620	719	452	1277	187	7352	141	194	1245	3187	24	3866	1735	1841	317	165	21405	263,107
7 Mos.	15423	9723	65040	507	3765	8822	1886	46572	1239	1970	7576	23056	203	25442	13272	9385	2738	518	466	7,296
North Carolina	July 426	192	1905	106	87	171	34	1988	11	20	180	469	4	595	328	234	68	23	40	1,353
7 Mos.	2979	1123	11409	549	484	1109	338	11641	93	176	1033	3147	31	3177	2354	1801	389	6	188	12,645
North Dakota	July 65	20	375	30	11	52	18	334	4	5	31	771	6	1037	467	498	137	1	277	10,645
7 Mos.	579	162	3021	212	114	365	142	2968	38	70	369	777	10	2186	1122	1036	193	7	1134	22,907
Ohio	July 1184	478	6315	279	275	792	114	5188	43	77	263	1553	10	14875	9091	5247	1345	95	6990	85,840
7 Mos.	10466	4209	44014	2231	2175	9539	1503	36286	480	1029	6046	12003	114	14875	9091	5247	1345	95	6990	85,840
Oklahoma	July 302	133	1762	54	32	127	36	1253	17	24	155	422	2	341	281	169	50	12	296	5,468
7 Mos.	2083	806																		



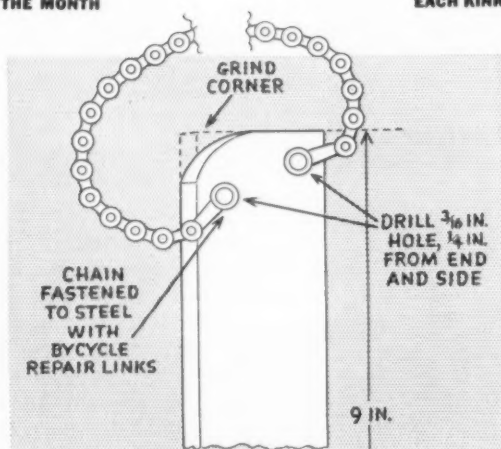
Time and work saving ideas on cars and trucks can pay off. Send Yours In Now!

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FOR THE KINK
OF THE MONTH

\$7.50

PAID FOR
EACH KINK



October's Kink of the Month Is Wrench to Remove Tight Filters

WE have had trouble removing the throw-away filters on some of the '57 and '58 cars. We bought different types of tools to do this. However, none seemed to work too well. I finally made a tool which really does the job, no matter how tight the filters are. It costs very little to assemble. Parts consist of a piece of steel, 21 links of a $\frac{1}{2}$ in. bicycle chain and 2 chain repair links. This wrench will ratchet so it can be used in a limited space. The harder the pull the tighter the wrench will get. It will not slip on the filter. *Walter R. Meyer, 2228 West Ave., So., La Crosse, Wisc.*

Hone Rear Cylinders From Beneath Car

To hone cylinders on motors where the No. 6 or 8 cylinder is back under the fire wall. Have the car blocked up and put the hone in No. 6 and 8 cylinder with the drive end down. Use a 6 inch extension attached to the electric drill from the bottom of the block. *Thomas L. Johns, Box 253, New Florence, Pa.*

Thawing Out Frozen Door Locks

Occasionally I have received calls at the shop for assistance to thaw out frozen door locks in the winter. I take an old vacuum cleaner hose from the shop cleaner with me on these service calls. I drive up alongside the car so the tail pipe is about in line with the frozen lock. Then I accelerate the motor just a little. Stick one end of the hose into the tail pipe and hold the other end up to the frozen lock cylinder. Usually in a minute or so I can stick the key in and unlock the door. *Erwin D. Miller, Service Manager, c/o Konen Cab Co., Inc., Fargo, N. Dak.*

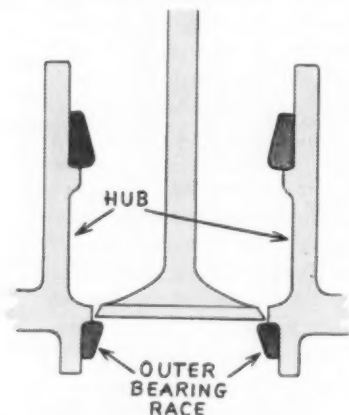
(Continued on page 84)

Removing '56 Ford's Choke Heat Tube

For fast removal of the automatic choke heat tube in the intake manifold on 1956 Ford's four-barrel carburetors, this is what we do. Remove brass elbow fittings from both ends of tube in manifold. Take a $\frac{3}{4}$ inch tap and tap large end. Be careful not to tap too deeply. About $\frac{1}{2}$ inch should be just right. Place a $\frac{3}{4}$ inch bolt into tapped end of tube. Grip head of bolt with a hammer type axle puller and tube will come out easily. *Nick Doljac, Nick's Garage, 22430 Nicholas Ave., Euclid 23, Ohio.*

How to Knock Out Outer Bearing Race on Wheels

A very difficult operation of knocking out the outer bearing race on the front wheels of 1955 to 1958 Chrysler line cars can be made easy by using an intake valve $1\frac{1}{2}$ inches across the head as a knocker. There is so little of the race jutting out from the shoulder on the inside of the hub, it can't be removed with an ordinary punch. Bushing knockers are either too large or too

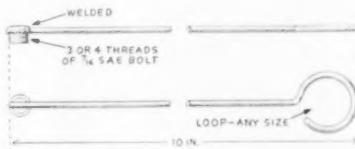


small to do the job. Just lay the wheel flat down and drop the valve down into the hub. It won't

even be necessary to hold the valve. The very thinness of the valve head prevents hanging up in the hub when driven thru. *Howard E. White, Service Mgr., Mabe-Cartwright Motors, Inc., Welch, W. Va.*

Fluid Coupling Installing Tool

This tool will aid in connecting fluid coupling to crankshaft flange on Chrysler products, such as a '51 Chrysler Fluidmatic. It is a job that can be time consuming. This tool will speed up the job. To make the tool, cut 4 threads off a $\frac{7}{16}$ SAE bolt. Then form a $\frac{1}{8}$ D piece of welding rod in shape shown in the illustration. By welding the

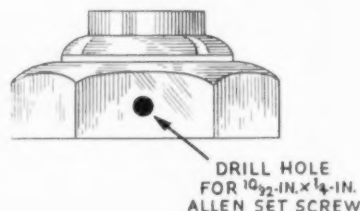


two pieces together, the tool is made. The method for using the tool is as follows: Take one of the nuts which fastens the unit to the crankshaft and start it on the thread portion of the tool. Run it on with your fingers for a couple of turns. When coupling is in place, install lock washer

with fingers and hold tool and nut vertical. Center nut with stud. By turning tool and nut about 90 degrees clock-wise, the nut should be started. After nut is started it may be easily run on the stud with an open end wrench. *A. Lane, Box 357, Wentzville, Mo.*

Securing Adjusting Nut On Chrysler Power Str.

After preloading power train assembly and making final adjustments, the adjusting nut sometimes works loose, causing re-adjustment of the complete assembly once more. To avoid

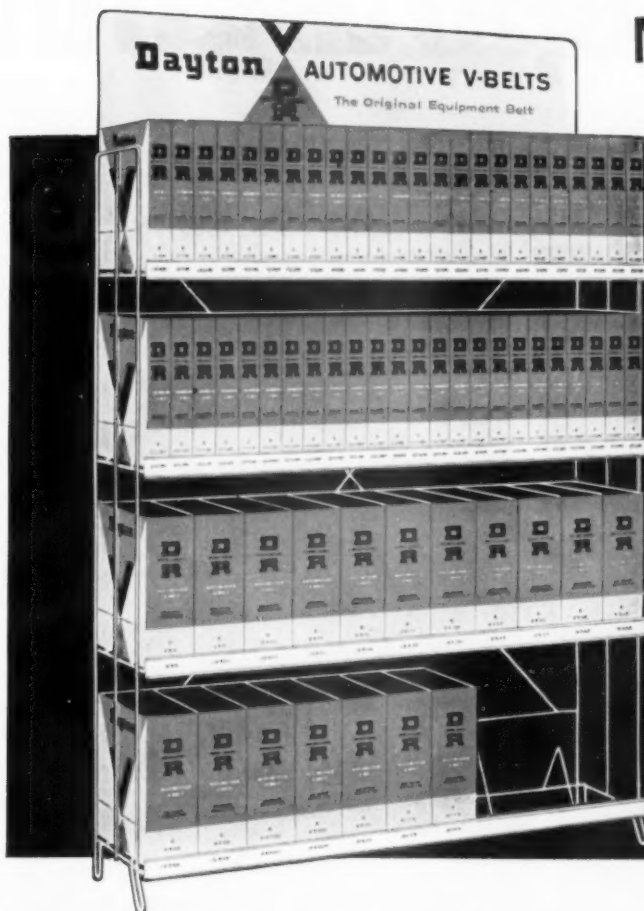


this, we drill a hole in the adjusting nut and place threads in the hole, using a 10-32 inch tap. Insert a small piece of lead in the hole, followed by a 10-32 x $\frac{1}{4}$ inch Allen set screw. The lead is used to prevent damage to the surface of the worm shaft. Once the adjusting nut is adjusted properly, tighten the Allen set screw and your final adjustment is complete. *William Malone, Shively Motors, Inc., 801 Lincoln Way West, Chambersburg, Pa.*

If you have an original idea for a special tool, a short cut on any job or any trick of value to others, write it down and if necessary make a rough sketch. Just make it clear. Send it to Motor Age. If your Kink is used it may bring you \$7.50 or \$25. All entries become the property of the Chilton Company. Because of the quantity of entries sent in, none can be returned.

NEW!

Dayton BOXED AUTOMOTIVE V-BELT MERCHANDISER



NEW! NEAT!
PACKAGED
for PROFIT!



Now, sell and profit with Dayton Automotive V-belts — individually BOXED for easier stocking, better showing and faster selling.

Bright, compact BOXES store conveniently in the space-saving BB-66R Merchandiser. You stock 50 sizes, 66 V-belts — coverage for over 92% of your sales opportunities. V-belt size is clearly visible on both BOX and Merchandiser so inventory control couldn't be simpler. One glance tells sizes you need to reorder.

Your sales area always looks neat and orderly, too. The BB-66R Merchandiser takes a space only 27 1/4" wide by 43" high . . . sets on the floor or hangs on the wall.

Dust-resistant orange, black and white boxes set solidly in the heavy 3/4" coated steel wire rack . . . make an attractive mass display that immediately sells the superior quality of Dayton Automotive V-belts — the original equipment V-belt.

Find out how you can sell and profit from new, neat, conveniently BOXED Dayton Automotive V-belts. Send now for complete details, without obligation.



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Dayton Rubber

MAIL TODAY!

Automotive Wholesalers Div. • The Dayton Rubber Co.
Dayton 1, Ohio

Gentlemen: Dayton's BOXED Automotive V-belts are just what I need! Rush details!

Name

Address

City State

New SUBURBAN "built-in spotlight"

Now... See in spite of the other car's lights!



BRACE YOURSELF! Here comes another driver who hasn't dimmed his lights. He's 175 feet away. Your vision of your side of the road is "washed out" by his glare. Then after you pass, it takes precious seconds for your eyes to readjust to the reduced light, and you still can't see the road ahead clearly. It's like entering a dark theatre on a sunny day!



NOW YOU CAN SEE in spite of the other car's lights—better than ever before, because you have new G-E SUBURBAN Headlamps. These "built-in spotlight" effect in the low beam projects more light along the right shoulder, helps keep your eyes on your side of the road. Now you can spot that fallen box at the 200-foot mark—which you couldn't see with your old headlamps!

New G-E SUBURBAN Headlamps have a "built-in spotlight" ...in the low beam!

No other 2-headlamp system ever gave you as much light in the low beam as these new General Electric SUBURBAN Headlamps. And you need more light in the low beam when meeting oncoming cars—even if the other driver dims his lights and has them aimed properly.

This new General Electric low beam filament is optically centered in the reflector—gives a

"built-in spotlight" effect—puts more light where you need it to make passing easier and safer. Helps you recover your vision more quickly when the other car has passed.

Have a pair of G-E SUBURBAN Headlamps installed and aimed by your dealer, garage or service station today! General Electric Co., Miniature Lamp Dept. L-108, Nela Park, Cleveland 12, O.



Special low-beam filament shield lets you see better in fog, rain or snow. Upper beam reaches far and wide for safer driving on open road.

Progress Is Our Most Important Product

GENERAL  ELECTRIC

HEADLAMPS with in the low beam!

NOW YOUR CUSTOMERS WILL SEE BETTER AGAINST ONCOMING HEADLIGHTS!

The "built-in spotlight" effect in the low beam projects much more light farther down the right side of the road. This helps the driver see through the light from oncoming headlamps even though they may be aimed too high, or the other driver fails to dim. *No present 2-headlamp system can give as much light in the low beam as new G-E SUBURBAN Headlamps!*

Nine out of ten customers need *pairs* of G-E SUBURBAN Headlamps for safer, easier, more comfortable seeing.

Install a set on your own car and *see* for yourself the great difference they make. After you've sold yourself on G-E SUBURBAN Headlamps, selling your customers will be easy. Be ready to take advantage of G.E.'s big Fall advertising campaign . . . for extra sales and profits!

Order your G-E SUBURBAN Headlamps NOW!

You can now order new G-E SUBURBAN Headlamps in new colorful packages . . . *four* in a carton. You'll need a minimum of four 6-volt and four 12-volt lamps to get



GE #6006-6 volt
GE #6012-12 volt

started. Each carton of four 6-volt lamps contains an eye-catching 32" x 21" streamer. On the reverse side are all the selling facts and technical information you'll need to sell *pairs* of G-E SUBURBAN Headlamps. Order 'em from your G-E Lamp wholesaler today . . . and be ready to sell tomorrow. General Electric Co., Miniature Lamp Dept., Nela Park, Cleveland 12, Ohio.

Here's the opening gun of the biggest headlamp campaign in G-E history. Full page ads will run in October, November and December issues of SATURDAY EVENING POST, LOOK, SPORTS ILLUSTRATED, POPULAR MECHANICS, HOLIDAY, MECHANIX ILLUSTRATED, PROGRESSIVE FARMER and SUCCESSFUL FARMING. More than 166,000,000 people will read these magazines carrying G-E SUBURBAN Headlamp ads during this intensive campaign. *Your* best customers are sure to be among them.



Progress Is Our Most Important Product

GENERAL  ELECTRIC

CURRENT PASSENGER CAR PRICE, WEIGHT AND BODY TABLE

Following are prices at factory for cars with standard equipment as of September 15, 1958. State or local taxes, transportation and finance charges and optional equipment are extra.

BODY MAKE AND MODEL	List Price at Factory without Federal Taxes				Federal Taxes and Handling Charges Suggested Price at Factory including Federal Taxes				Shipping Weight			
	Federal Taxes and Handling Charges Suggested Price at Factory including Federal Taxes				Shipping Weight				Federal Taxes and Handling Charges Suggested Price at Factory including Federal Taxes			
AMERICAN MOTORS CORP.												
RAMBLER												
Del. Sedan, 2d.	1631				2463							
Sup. Sedan, 2d.	1710				2475							
Del. Luv. 6												
Sedan, 4d.	1875	172	2047	2947								
Super 6												
Sedan, 4d.	2028	184	2212	2960								
H. T. Sedan, 4d.	2098	189	2287	2963								
Sta. Wagon, 4d.	2302	204	2506	3069								
Custom 8												
Sedan, 4d.	2135	192	2327	2968								
Sta. Wagon, 4d.	2409	212	2621	3079								
Rebel, Sup. V8												
Sedan, 4d.	2149	193	2342	3300								
Sta. Wagon, 4d.	2423	213	2636	3410								
Rebel, Cus. V8												
Sedan, 4d.	2256	201	2457	3313								
H. T. Sedan, 4d.	2326	206	2532	3328								
Sta. Wagon, 4d.	2530	221	2751	3418								
Amb. Sup. V8												
Sedan, 4d.	2369	218	2587	3456								
Sta. Wagon, 4d.	2643	238	2881	3544								
Custom, Cus. V8												
Sedan, 4d.	2504	228	2732	3462								
H. T. Sedan, 4d.	2588	234	2822	3475								
Sta. Wagon, 4d.	2778	248	3026	3568								
H. T. St. Wag., 4d.	2852	254	3116	3586								
CHRYSLER CORP.												
CHRYSLER												
Windser												
Sedan, 4d.	2849	225	3074	3895								
Hardtop, 2d.	2929	231	3159	3860								
Hardtop, 4d.	3068	236	3224	3915								
Twn. & Ctry.	3302	289	3591	4185								
Twn. & Ctry, 3s.	3479	272	3748	4248								
Saratoga												
Sedan, 4d.	3485	273	3758	4129								
Hardtop, 2d.	3541	277	3818	4045								
Hardtop, 4d.	3613	282	3895	4145								
New Yorker												
Sedan, 4d.	3923	307	4230	4195								
Hardtop, 2d.	3971	311	4282	4205								
Hardtop, 4d.	4024	315	4339	4240								
Conv. Coupe	4356	340	4696	4350								
Twn. & Ctry, 2s	4456	347	4803									
Twn. & Ctry, 3s	4656	362	5013	4445								
Hardtop, 2d.	4740	368	5108	4305								
Conv. Coupe	5140	398	5538	4475								
DE SOTO												
Fireweep												
Sedan, 4d.	2567	207	2774	3660								
Sportsman, 2d.	2633	212	2845	3680								
Sportsman, 4d.	2692	216	2908	3720								
Conv. Coupe	2939	235	3174	3950								
Sta. Wagon, 2s	2983	238	3221	3955								
Sta. Wagon, 3s.	3115	248	3361	3986								
Firebird												
Sedan, 4d.	2910	225	3035	3855								
Sportsman, 2d.	2996	232	3128	3825								
Sportsman, 4d.	2949	238	3185	3920								
Conv. Coupe	3185	254	3439	4065								
Firefly												
Sedan, 4d.	3268	260	3528	3990								
Sportsman, 2d.	3354	266	3620	3920								
Sportsman, 4d.	3406	270	3678	3980								
Conv. Coupe	3630	287	3917	4105								
Sta. Wagon, 2s	3684	291	3975	4225								
Sta. Wagon, 3s.	3816	301	4117	4295								
Advertiser												
Sportsman, 2d.	3722	294	4016	4000								
Conv. Coupe	3999	315	4314	4180								
DODGE												
Coronet 8												
Club Sedan	2235	179	2414	3360								
Sedan, 4d.	2210	185	2495	3410								
Lancer, 2d.	2349	187	2536									
Coronet V8												
Club Sedan	2335	186	2621	3505								
Sedan, 4d.	2410	192	2602	3555								
Lancer, 2d.	2449	195	2644	3540								
Lancer, 4d.	2526	201	2729	3605								
Convertible	2693	214	2967	3725								
Royal V8												
Sedan, 4d.	2554	203	2757	3570								
Lancer, 2d.	2607	207	2814	3585								
Lancer, 4d.	2664	211	2875	3640								
Gus. Roy. V8												
Sedan, 4d.	2786	219	2965	3640								
Lancer, 2d.	2804	222	3026	3610								
Lancer, 4d.	2870	227	3097	3670								
Convertible	3015	238	3253	3785								
CHRYSLER CORP. cont'd												
DODGE, Cont'd												
Regal. V8												
Lancer, 2d.	2965	234	3200									
Sta. Wagon												
Suburban, 2d.	2715	215	2930	3875								
Sierra, 2d.	2775	220	2995	3930								
Sierra, 3s.	2907	230	3137	3990								
Cus. Sierra, 2s.	2940	232	3172	3955								
Cus. Sierra, 3s.	3072	242	3314	4035								
IMPERIAL												
Imperial												
Southmont., 2d.	4417	347	4764	4840								
Southmont., 4d.	4516	354	4870	4795								
Sedan, 4d.	4516	354	4870	4590								
Crown												
Southmont., 2d.	4928	365	5313	4730								
Southmont., 4d.	5155	402	5557	4915								
Sedan, 4d.	5155	402	5557	4755								
Conv. Coupe	5273	411	5684	4820								
Le Baron												
Sedan, 4d.	5468	426	5894	4780								
Southmont., 4d.	5468	426	5894	4940								
Limeusine	14019	981	15000	5860								
PLYMOUTH*												
Plaza V8												
Bus. Coupe	1943	158	2101	3320								
Club Sedan	2024	164	2190	3315								
Sedan, 4d.	2074	168	2242	3415								
Savoy V8												
Club Sedan	2153	174	2327	3360								
Sedan, 4d.	2200	178	2378	3400								
Sport Coupe	2222	179	2401	3400								
Sport Sedan	2286	184	2472	3475								
Club Sedan	2278	183	2461	3370								
Sedan, 4d.	2325	187	2512	3430								
Sport Coupe	2341	188	2529	3410								
Sport Sedan	2407	193	2600	3520								
Conv. Coupe	2525	202	2727	3545								
Suburban V8												
Deluxe, 2d.	2318	186	2504	3645								
Deluxe, 4d.	2368	190	2558	3740								
Custom, 2d.	2431	195	2626	3690								
Cust., 4d, 6 p.	2481	199	2680	3755								
Cust., 4d, 9 p.	2611	209	2820	3840								
Sport., 4d, 6 p.	2623	210	2833	3745								
Sport., 4d, 9 p.	2753	220	2973	3830								
Fury V8												
Sport Coupe	2808	224	3032	3510								
FORD MOTOR CO.												
FORD, Cont'd												
Sta. Wags. V8												
Ranch Wag., 2d.	2293	166	2479	3620								
Ranch Wag., 4d.	2343	180	2533	3675								
Del Rio Wagon	2392	181	2585	3625								
Ctry. Sed., 6p.	2442	197	2639	3882								
Ctry. Sed., 8p.	2542	204	2746	3750								
Country Squire	2663	213	2876	3787								
Thunderbird												
Tudor	3330			3708								
Convertible												
LINCOLN												
Capri												
Hardtop, 2d.	4415			4735								
Sedan, 4d.	4553			4735								
Hardtop, 4d.	4553			4810								
Premiere												
Hardtop, 2d.	4894			4820								
Sedan, 4d.	5124			4880								
Hardtop, 2d.	5124			4880								
Continental												
Coupe, 2d.	5367			4865								
Sedan, 4d.	5587			4865								
Hardtop, 4d.	5597			4865								
Convertible	5792			5040								
MERCURY												
Monteury												
Sedan, 4d.	2422			4080								
Sedan, 4d.	2487			4160								
Hardtop, 2d.	2532			4075								

* Prices of 8 cyl. models are \$137 less than 8 cyl. models for the Custom; \$124 for the Fairlanes and \$107 for the Station Wagons.

* Prices of 6 cyl. models are \$100 less than 8 cyl. models.

Spicer

**UNIVERSAL JOINT
KITS**

FOR PASSENGER CARS

**BIG
PROFITS...
FAST
TURN-OVER**



**SPICER MAKES IT
EASY TO INCREASE
YOUR LUBE BAY PROFITS . . .**

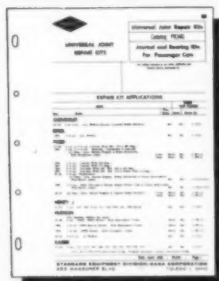
**Stock only 4 Spicer Universal Joint Replacement Kits
and you can service Universal Joints on 85% of all cars**

AND, TO HELP YOU INCREASE SALES, YOU GET ABSOLUTELY FREE

... all the materials you need to start replacing today, at no extra cost, when you buy only these 4 SPICER UNIVERSAL JOINT REPLACEMENT KITS



An attractive display that serves as your silent salesman. Especially designed to hold the 4 Spicer Universal Joint Replacement Kits you need.



Complete installation instruction . . . telling and showing you the fastest, easiest methods used to service Universal Joints right on your lube hoist.



Easy-to-read application sheet. Tells at a glance the exact Spicer Universal Joint Replacement Kit required for each make and model vehicle.

Here's the easy 1-2-3 way to increase your lube hoist profits



When you're lubricating, check every car on the hoist for loose and worn universal joints. It only takes a minute.



Check the application sheet for the part number of the correct Spicer Replacement Kit, if one is needed.



Through this service, you've made a lasting friend and steady customer. What's more, your bill for parts and labor means a real profit for you.

Insure yourself additional customers and profits through an adequate stock of all Spicer Universal Joint replacement kits.

CONTACT YOUR LOCAL DISTRIBUTOR OF SPICER PRODUCTS
FOR FURTHER DETAILS



DANA CORPORATION • STANDARD EQUIPMENT DIVISION

253 Waggoner Boulevard • Toledo 1, Ohio

Dodge Trucks Continued from page 63

weather, the concealed running board gives truck owners stronger cab construction. This acts as an additional brace for off-highway operations.

All models except the W300M and forward-control have new suspended clutch and brake pedals. Dual headlights, first introduced last year, again will be available. They are standard on all models except cab-over-engine, forward-control, and W300M.

The high road clearance of the 1959 models is of value to farmers and ranchers for field operations. Or for off-highway driving, and for travel on secondary or rutted roads.

The full-traction differential, again available on conventional half-ton models, offers increased traction on ice, snow, mud, and in field operations.

The W300, 1-ton 4-wheel-drive unit with up to 10,000 pounds G.V.W., again is available as a pick-up, stake, chassis and cab. Or as a chassis and cowl model for special bodies. It is reported especially useful in off-highway work.

Of special interest to farmers and ranchers are 28 stake and platform models, from the 100 series with 5,100 pounds maximum G.V.W., through the 500 series with 19,500 pounds maximum G.V.W. These are available in 7½, 9, 12 and 14-foot body lengths.

Another characteristic of the new Dodge pick-ups is their low loading height. Pick-up boxes have flat-top sides to further assist loading and unloading.

Two grille designs make light and medium-duty trucks stylishly different in appearance from heavy-duty models. A third grille pattern has been established for cab-over-engine models.

"Last year we designed our light and medium-tonnage

trucks to be sharply different in appearance from the high-tonnage vehicles," Patterson explained. "We are continuing that policy. We do not feel it is necessary that heavy-duty trucks be radically re-styled from year to year. This is an added expense to the truck owner and dates his fleet. Therefore, we have retained the outstanding appearance features of our high-tonnage models while creating two separate styling images for our trucks."

Extensive changes enhance the luxury and comfort of the new Dodge cabs. Concealed running boards on low and medium-tonnage units offer advance styling, easy entrance and exit, and protection against inclement weather.

Two color combinations are available for seats in custom cabs. A new instrument panel is incorporated on all models except forward-control, cowl, and W300M. A new instrument cluster is designed for flick-of-the-eye reading. Instrumentation for light and medium-tonnage models is customized for this type of service. High-tonnage models have a distinctively styled instrument cluster for heavy-duty service. The heavy-duty instrument cluster also is available for low and medium-tonnage vehicles.

A new heating and ventilation system brings new comfort for winter driving; more thorough defrosting even in the most severe weather.

New suspended brake and clutch pedals offer added convenience and comfort. A new hydraulically-operated clutch brings operating ease with smooth, positive clutch engagement.

The master cylinder for the clutch is mounted on the firewall next to the brake master cylinder for easy service access. An

improved 13-inch spring-cushioned clutch for all 700 series models gives smooth clutch action. A 14-inch clutch on all 800 and 900 series units gives 192 square inches of lining area for long life in heavy-duty service.

A new brake system gives D100 models larger brakes than any comparable truck in the industry.

A new T800-HD model with hydraulic brakes standard has a total lining area of 871.28 square inches. With extra-equipment 11,000-pound-capacity front axle and air brakes. T800-HD and T900 models have a total lining area of 1,004.85 square inches.

Air brakes with a lining area of 920.75 square inches are standard on T900 models.

Imperial

Continued from page 53

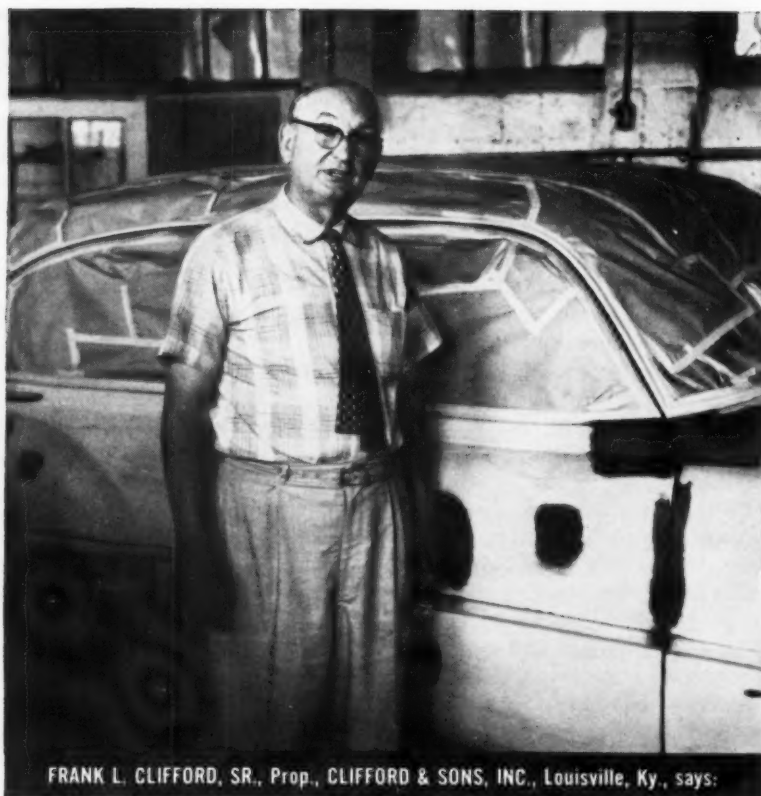
carburetor and dual exhaust are standard.

Imperial introduces three new optional hardtop roof treatments for 1959. The Silvercrest Landau roof has a stainless steel front and a simulated leather canopy; the Silvercrest roof consists of the stainless steel front roof area; and the Landau roof consists of the simulated leather rear canopy.

New and more luxurious seat and door panel designs have been created for the Imperial interiors. A wide choice of new fabrics, including the finest color-harmonized all-wool broadcloths and leather are available.

Also this year, the newly-designed Imperial instrument panel features indirect lighting. And a bar-type speedometer in which a band of color moves from left to right as speed is increased. It shows green up to 30 m.p.h.; amber from 30 to 50; and red above 50 m.p.h.

A roll of protective padding has also been added to the top of the front seat back of the Imperial Crown and Imperial LeBaron models.



FRANK L. CLIFFORD, SR., Prop., CLIFFORD & SONS, INC., Louisville, Ky., says:

"The Yellow Pages are our star salesman"

"When I ask customers how they came to find us, so often they say, 'Through your advertising in the Yellow Pages.' Aside from word of mouth advertising, the *great majority* of our business comes in through the classified directory."

When a prospect needs a paint or body job, he naturally turns to the Yellow Pages to locate a reliable outfit. Make sure your prospects know *who* you are, *where* you are, and *what* services you offer. Advertise in the Yellow Pages, where 9 out of 10 people look for suppliers and servicers.

Call your local Yellow Pages man at your telephone business office for full information.

MR. CLIFFORD SELLS ALL HIS SERVICES with Yellow Pages advertising under several headings. This 1/4-page ad (shown reduced) turns Louisville prospects into Clifford customers *all year long!*

AUTOMOBILE

PAINING & BODY WORK

"OVEN BAKED"





INFRA RED

• Factory Refinishing Methods
• Glossing Refin. Cream
• Touch
• Like Like New
• Adds Years of Value to Your Car

COMPLETE COLLISION SERVICE
TRUCK PAINTING
LARGE AND SMALL

CLIFFORD & SONS, Inc.

Insurance Estimates Our Specialty
EXPRESS COUPONS

219 S. 9th

UNDER 3-0669

Volkswagen

Continued from page 71

with small European cars. There is room behind the special seats for a one-passenger jump seat or week-end luggage for two.

No extra parts are required in the D-2, with the exception of the windshield glass which is built for '51 to '55 Ford Council or Zephyr glass. All V-W components, such as headlights, tail lights and speedometer fit to the Alken body. Equipment, chassis mounted, such as brakes, clutch and hand brake are not touched. This gives the D-2 a distinctive V-W look.

Beneath the rigidly-laminated body shell of the D-2 is a network of 16 bulkheads. These strengthen the body and improve its bolt-on union with the V-W chassis. They are mounted to the body at the factory, eliminating anything more than a simple bolt-on project for the buyer.

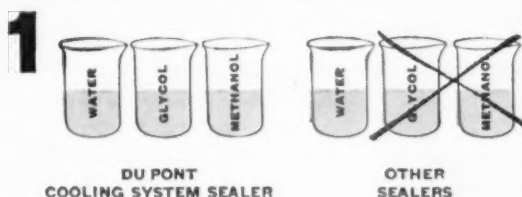
The convertible body is shipped with removable hard top, roll-up windows, factory fitted heaters, windshield, luggage lockers and custom bucket seats. Because it is designed exclusively for the V-W chassis, there are fewer alterations.

To install the Alken D-2, V-W front and rear suspension must be lowered and jacking points relocated because the D-2 body is 300 pounds lighter than the conventional metal V-W sedan body. The V-W steering column must be pivoted downward, but not altered, because body lines are lower on the D-2. The V-W fuel tank must be modified by centering the filler opening. These are the only modifications. No chassis outriggers or supports are required.

The D-2 chassis will fit without cutting. No welding or manipulation is needed. With the body on the chassis, replace the 36 chassis bolts. Install the wiring. Remove headlights and tail lights from the metal body and fit them into the D-2 body.

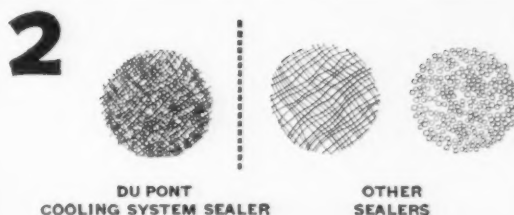


Why Du Pont Cooling System Sealer is better in 4 major ways



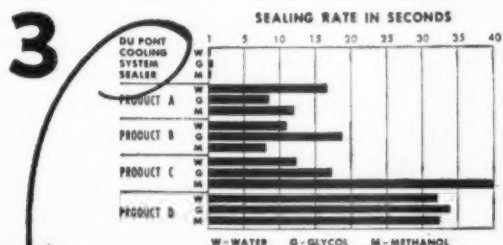
BEST IN ANTI-FREEZE AND WATER

—Among the five leading brands tested, *only* Du Pont Cooling System Sealer is equally effective in all three major types of coolants—water, glycol anti-freeze solution, and methanol anti-freeze solution. In all tests, with all coolants, Du Pont Cooling System Sealer produced effective seals of leaks in gaskets, engine blocks and cooling cores.



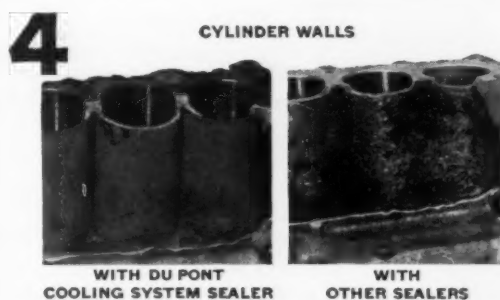
GREATEST SEALING POWER—Only

Du Pont Cooling System Sealer contains a scientifically balanced combination of *two* fiber solids for double-strength sealing power. Other sealers have only one. These tiny particles flow through radiator and heater tubes as small as 35/1000 of an inch... form an interlocking mat that can plug holes against pressures up to 30 lbs. per sq. in. Du Pont Cooling System Sealer will not clog a cooling system.



FASTEST SEALING POWER—Laboratory

tests prove that Du Pont sealer stops leaks in radiators with all three major coolants in *less than a second*. None of the five other best-known brands tested could match this performance. Du Pont Cooling System Sealer is made for today's high-pressure radiators, and is able to stop any external, internal or gasket seepage from holes up to 1/32 of an inch wide.



HARMLESS TO METALS and HOSES

—The composition of Du Pont Cooling System Sealer is not harmful to cooling system metal and absolutely will not cause corrosion. Unlike some sealers, Du Pont Cooling System Sealer contains no petroleum oils that soften and damage rubber hoses.

ORDER FROM YOUR SUPPLIER TODAY!



BETTER THINGS FOR BETTER LIVING
...THROUGH CHEMISTRY

Another fine Du Pont No. "7" Product

DU PONT COOLING SYSTEM SEALER

LIFTING **POWER** FOR EVERY SERVICE!

WAYNE LO-DRIVE-ON LIFT



The lowest cars clear it . . . sports and passenger. Runways only 2-5/16" above floor. Automatic, foolproof wheel-check. Quicker positioning . . . peak safety.

WAYNE FRAME LIFT



Clear overhead for every service . . . brings every part of car within easy reach. Self-storing lifting pads for all types of cars . . . standard or special frame. When not in use lift is only 2 1/2" above floor.

WAYNE FREE WHEEL LIFT



All purpose lift for efficient tire, lubrication and brake service. Accommodates all types of cars . . . wide or narrow tread.

Wayne

LIFTS

THE WAYNE PUMP COMPANY • Division of Symington Wayne Corporation
SALISBURY MD. TORONTO, CANADA

New Dodge . . .

Continued from page 54

Now let's take a look at compression ratio is 10.1 to 1 and bore and stroke is 4.12 x 3.38 inches. A two-barrel carburetor is standard and dual exhaust optional on Royal models and on the Sierra station wagons. A four-barrel carburetor is standard on the Custom Royal models and Custom Sierra station wagons.

Two versions of the Dodge D-500 engine are available as an option on all models in the Dodge line for 1959. Displacement is 383 cubic inches; compression ratio 10.1 to 1; bore and stroke of 4.25 x 3.38. The D-500 is available with a four-barrel carburetor and dual exhausts. Or with two four-barrel carburetors, dual exhausts, and special camshaft, valve springs, dampers, distributor and air cleaners.

On Dodge four-door hardtops the roof and back window are newly-styled. The new sculptured "stepped" roof design, with the rear section raised slightly, provides increased leg, knee and head room in the rear seat. Glass area of the rear window has been increased 15 per cent.

Seat and door panel designs and fabrics and vinyls for Dodge interiors are new. For an added touch of luxury in two and four-door hardtop models, Dodge offers a new ceiling material that is softer to the touch and has improved sound-absorbing qualities.

The newly-designed Dodge instrument panel has a definite aircraft flavor. Instruments are grouped beneath a bar-type speedometer. A band of color moves from left to right as speed is increased. The bar shows green up to 30 m.p.h., amber from 30 to 50, and red above 50 m.p.h.

Rambler Continued from page 56

The 215-horsepower Rambler Rebel V-8 has a four-barrel carburetor which offers improved control of fuel under all conditions and which minimizes flooding problems. The engine's valve system has been redesigned for longer life and quieter operation.

Both the Six and V-8 require only regular-grade gasoline for further economy of operation.

In another move to provide additional fuel economy, formerly optional axle ratios designed to give more miles per gallon have become standard equipment for 1959 models. The other ratios are now optional at no extra cost.

For 1959 the exhaust system also features "longer-life" design, which will minimize rust problems. The mufflers have an aluminized coating on internal tubes and baffles and on the end plates, and the outer shell is zinc coated. Metal thickness for tail pipes has been increased 40 per cent, and, in addition, they receive the aluminized coating. The tail pipes are formed and installed so that the welded seam is at the top to prevent moisture from collecting at a seam point.

An optional dual-exhaust system is available on Rebel V-8 models.

The push-button automatic transmission control system has been changed to eliminate the key-start. The starter button now is combined with the neutral button for simpler operation. A vacuum lock-out prevents starter engagement when the engine is operating. For improved visibility the control panel lighting has been changed.

The manual transmission shifting linkage is redesigned for improved smoothness and ease of operation.

A red warning light which flashes on when the emergency brake is engaged is a new option,

designed to eliminate accidental wear of brake linings.

The braking systems on the 1959 Rambler models have been substantially improved. Brake linings on both the Six and Rebel V-8 have been increased in thickness to $\frac{7}{32}$ -inch. As a result, the usable lining depth from surface to rivet heads is 30 per cent greater for longer lining life.

Optional self-adjusting brakes will be offered on six-cylinder models in 1959, as well as on the V-8's. The automatic adjusting of these brakes is accomplished during normal driving.

New on Sixes this year is a feature formerly used only on the V-8; a double-acting wheel cylinder on the rear brakes. This improves braking action in reverse gear.

On V-8 models, the front brake primary shoe width has been increased from two inches to $2\frac{1}{2}$ inches, increasing total brake lining area to 167 square inches. The Six brake area is 150 square inches.

Corvette

Continued from page 60

Corvettes. Seats have a more pronounced "bucket" effect. A new surface design of widely spaced ribs decorate the cushion and back-rests. Door release control knobs and arm-rests are more conveniently located. The passenger assist bar at the right of the driver is padded. A new stowage shelf has been added below the assist bar. Concave lenses eliminate distortion and glare over instruments.

Body color selections are Tuxedo Black, Classic Cream, Frost Blue, Crown Sapphire, Roman Red, Snowcrest White and Inca Silver, with the cove area of the front fenders in a contrasting color when desired. Solid remov-

able tops or automatically folding cloth tops in one of four colors are among options. A new rubberized fabric permits the cloth top to lie flatter in the well.

Engineers have added radius rods in the rear suspension. Why? As a resistance to axle housing torque reactions. To achieve a more precise control and better traction, the rods are extended. From rigid brackets at the top of frame side-members to the axle housing. Rods are pivotally mounted. Approximately parallel to the forward portion of the rear springs. The arrangement leaves the springs virtually free of torque influence.

Wheel trim discs are slotted for better brake cooling. A new option is centered metallic brake lining equipment. This offers superior anti-fade characteristics under severe operating conditions. The optional four-speed transmission includes a manually controlled reverse gear lock-out for 1959.

Simca Marketing Firm Established

Formation of Chrysler International, S. A., for the development of world markets for Chrysler and Simca automotive and other products was announced recently by L. L. Colbert, president, Chrysler Corporation.

Principal offices of the new company are being established in Geneva, Switzerland. In addition, major regional offices are being established in Western Europe. Also in Latin America, and the Sterling area.

Chrysler's program to expand its overseas operations follows completion of arrangements for Chrysler Corporation to acquire a 25 per cent interest in Simca. Simca is the largest non-government owned passenger car manufacturer in France.

extends from the front fender rearward to the center of the rear door. At this point, it is joined by a reverse angle trim plate. This plate increases in width and projects to the end of the rear fender. On custom models, the spear panel area is covered with silver anodized aluminum.

Front and rear bumpers have been redesigned. A recessed center section on both bumpers offers styling and protection for license plates. The thickness of the bumpers has been increased 23 per cent for greater strength and durability.

The tail-lights on the 1959 Ambassador are made of new high-visibility red color plastic lens. For added visibility and safety, red "Scotch-Lite" reflective material has been integrated into the vertical rear fender fin molding.

The 1959 Ambassador line is offered in 15 solid colors and 18 two-tone combinations. All exterior paints are super enamels, providing a harder surface finish that resists dulling and maring.

The interiors of the new Ambassador models have been restyled with new seat designs, and colorful, matching fabrics and vinyls.

Individually adjustable reclining seats are offered for the first time as optional extra cost equipment on all models. The front cushion is divided and two separate seats are fitted with separate sets of tracks. Entirely new front seat head-rests are available as optional equipment, either singly or in pairs, on all models.

The 1959 models equipped with automatic transmission will again feature push-button controls. A new starting system is employed on the new models, with the neutral and start (N/S) button combined into

one. Starting is accomplished by pushing in on the neutral-start button. A vacuum lock-out safety system prevents starter engagement when the engine is operating.

For improved visibility, the push-buttons have been color-coded for easy identification—driving ranges, green; neutral-start, amber; and reverse, red.

A new vacuum power assist has been incorporated into the mechanism for opening and closing of the heater door for greater ease of operation.

The Ambassador is powered by the same 270 horsepower overhead valve V-8 engine with a compression ratio of 9.7 to 1. It is equipped with a four-barrel Holley carburetor which incorporates new refinements for better control of fuel under all conditions. New, more resilient rear engine mounts for automatic transmission models improve engine smoothness.

The Ambassador is available with a standard transmission, optional overdrive, or the "Flash-O-Matic" automatic transmission, as optional equipment. The automatic transmission engine vacuum control system, called Telovac, has been modified for improved overall efficiency and smoothness.

A single exhaust system is standard on all 1959 models. Dual exhaust system is available as an extra cost option. For greater protection against rust and for longer life, the tail-pipes are made from welded-seam steel tubing that has been specially processed with a new aluminized coating. Mufflers are also improved with new aluminized and zinc coating processes.

A new parking brake warning light is offered as optional equipment. The red warning light, located on the instrument panel, lights automatically when

the engine is started. It remains on until the parking brake is released.

Like all American Motors cars, the Ambassador employs single unit body construction.

For longer life, all Ambassador bodies are put through a new "deep-dip" rustproofing process.

The Powr-Saver Fan and Powr-Lok differential are available on all Ambassador models as optional equipment.

Also offered as optional equipment are All-Season air-conditioning; Air-Coil Ride air suspension; power brakes; power steering; self-adjusting brakes and power windows.

AMA Makes Grant To Cornell Univ.

The Automobile Manufacturers Association has granted \$150,000 to Cornell University. Purpose: to support a program of crash injury research.

Harry A. Williams, AMA managing director, described the contribution as part of the automotive industry's continuing effort to promote automotive safety.

"The grant to Cornell," he said, "is in addition to previously announced AMA contributions to automotive safety programs. These total \$1,350,000 in the current fiscal year."

John A. Moore, director of the Cornell Crash Injury Research program, said the funds will enable the university to continue its study of the causes of injury in automobile accidents for another year.

In the past three years individual automobile manufacturers have added substantial contributions to previous grants, like those previously made by the Armed Forces Epidemiological Board; the Division of Research grants and fellowships of the National Institute of Health; and the U.S. Public Health Service.

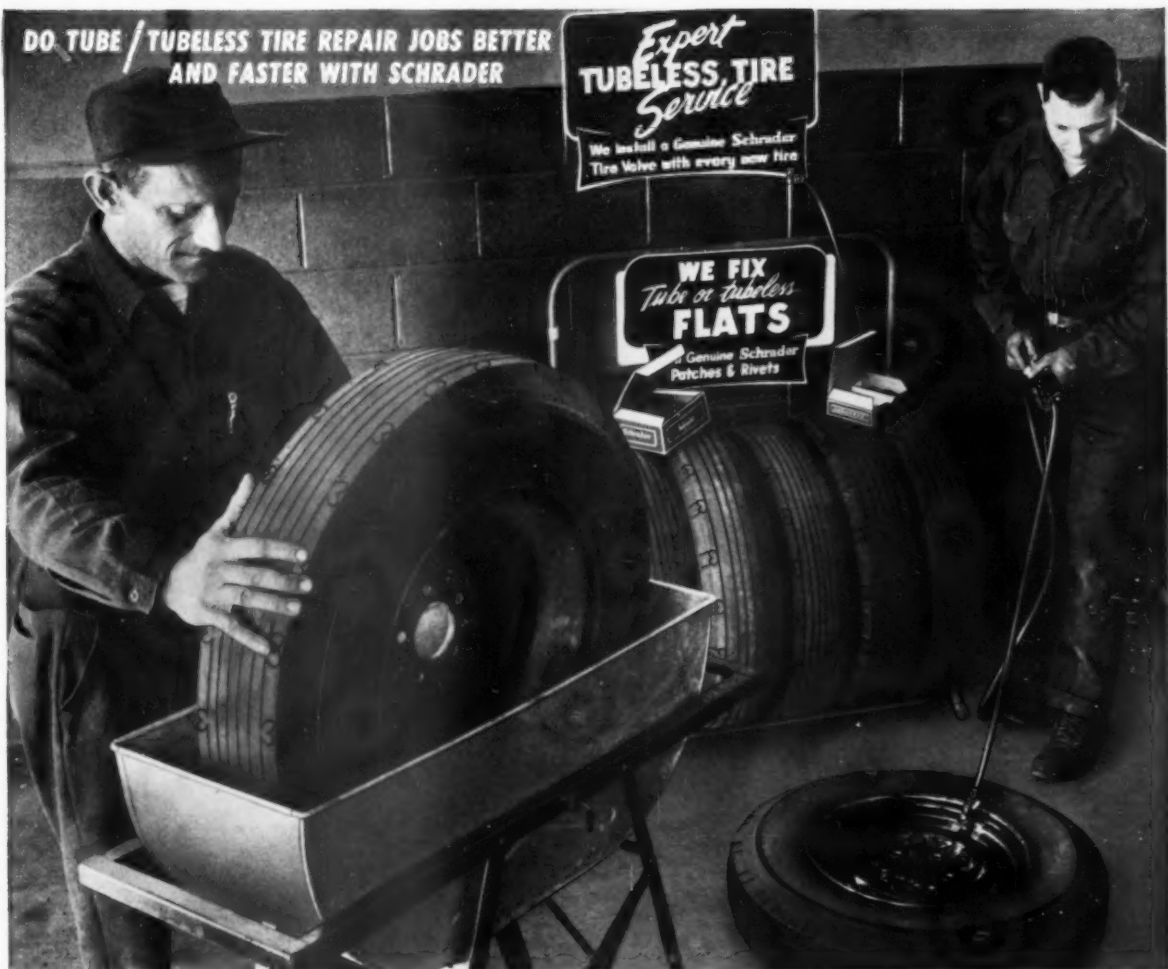
**DO TUBE / TUBELESS TIRE REPAIR JOBS BETTER
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Use new Schrader **FIX FLATS** Patches and Rivets! Tube or tubeless . . . the simple one-two-three procedures are on the box. Anyone can do it right and *fast*. But that's just a part of the job! Remember to seal in the air with genuine Schrader Caps and

Cores. And it's good practice to change the tubeless tire valve whenever you repair or replace a tubeless tire.

Your supplier has quality Schrader Products. Get those products you need to give the best flat-fixing service:



NEW "PULL THRU" SCHRADER COMPRESSION RIVETS will repair punctures caused by nails and round objects. Seal permanently 3 ways. Best tubeless repair on the market. No heat, buffing, or special tools.



NEW SELF-VULCANIZING PATCHES give a real cured-on repair from a cold type patch. No heat, smoke or vulcanizer. Tube or tubeless time saver. Multiple layers of rubber laminated for extra strength.



INVENTORY SAVER VALVE REPLACEMENT PACKAGES to handle any original equipment tubeless valve installation. Complete valve lineup for repairing every tube or tubeless tire now rolling. **PLUS CAPS AND CORES** that are standard the world over.

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FIRST NAME IN TIRE VALVES

FOR ORIGINAL EQUIPMENT AND REPLACEMENT

Now...to bring your customers

Champion announces opening of world's most modern



The engine laboratory area, heart of Champion's new center, has the most modern spark plug test facilities ever built. Able to handle the largest automotive gasoline engines made, these units even have hi-fi equipment for safely monitoring the sounds of an accelerating or wide-open engine from behind bulletproof-glass windows. Here Champion tests newly developed engines to determine the exact spark plug needed for peak performance. When necessary, Champion designs a new plug specifically for an engine.

Champions are engineered for every car made by Ford, General Motors, Chrysler, American Motors, Studebaker-Packard, and every major foreign maker

CHAMPION SPARK PLUG

even better performance...

Research and Engineering Center for spark plugs!

Champion-sparked performance has long been the world's finest—and racing records prove it! Now Champion's constant efforts to make that performance even better will have the benefit of the world's finest facilities for spark plug development

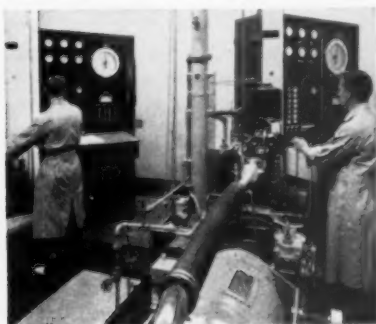
This month marks the official opening of the world's largest and most modern facilities for spark plug development—the new Champion Research and Engineering Center.

What do these new facilities mean to you and your customers? They mean that Champion Spark Plugs will keep on delivering the finest possible performance in the future, just as they do today.

These new facilities are the finest in existence for the development of spark plugs. And Champion has the men who can get the most from them—the *spark plug specialists* of the world's largest research and engineering organization devoted exclusively to spark plugs. Champion has the

"know how" that produced, for example, the exclusive 5-rib Champion insulator that sharply cuts flashover shorting . . . the Powerfire electrode that delivers top performance longer in modern engines . . . and the projected core-nose plug-type that has been so successful in General Motors overhead-valve engines. And Champion produces the spark plugs that power the world's finest performance, as proved by racing records.

The unbeatable performance that Champions deliver *now*—plus the promise of *even better* performance to come—are two of the best reasons in the world for always recommending *Champion Spark Plugs*—for any make of car!



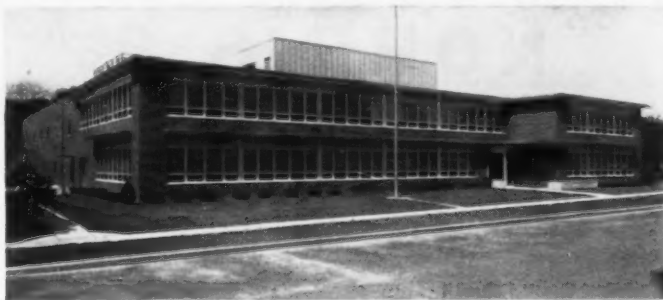
In one lab, specially designed test engines, precisely controlled and adjusted, are used to punish plugs with engine conditions far more severe than any found in actual use.



The electronics laboratory develops new instruments and methods for analyzing and checking problems of ignition and combustion as they affect spark plugs.



Racing proves any make of car does its best with Champions! Champions sparked 8 of the last 9 Indianapolis winners, 96% of all NASCAR stock-car victors during the last 5 years.



Everything in this new center has the one purpose of giving you and your customers the best possible spark plug performance. Here research experts study basic problems such as temperature ranges, fouling, and preignition limits to develop materials, alloys and designs that will improve performance even more.

COMPANY • TOLEDO 1, OHIO

Cooling System Continued from page 73

allow the entire cooling system to be completely drained of rusty, or dangerously acid solutions. Some cars have to be jacked up before the petcocks on the sides of the block can be opened.

If there are any signs of corrosion or scale and grease, use a chemical cleaner. Follow this with a neutralizer, if needed. If

there are signs of rust-plugging in the radiator tubes, have radiator and engine block pressure-flushed separately. Next, tighten the cylinder head bolts in proper sequence. Use a torque wrench to designated tension.

Check the thermostat for correct temperature. Thermostats are designed to open and close at a pre-determined tempera-

ture. If they are not operating properly they should be removed and tested. Inspect the thermostat bellows and valve. Make sure they are in good condition.

To be sure thermostat is working correctly, place it in hot water. Water should be 25 degrees above the temperature stamped on the thermostat valve. Submerge the bellows completely. Then agitate the water. Under this condition the valve should open fully.

Now remove the thermostat from the hot water. Let it cool. Place it in water 10 degrees below the temperature indicated on the valve. With bellows completely submerged, agitate water thoroughly. The valve should close completely.

Most water pumps are of the packless type and require no service or lubrication. A quick check on the water pump is to work the fan blades up and down by hand. If any play is noticed here, it is a good indication that the bearings are rough and the pump should either be replaced or rebuilt.

Inspect the radiator cap to see that the seal is intact and free of dirt. Make sure the rubber valve face is not distorted, swollen or otherwise damaged.

Look the radiator hoses over very carefully. A soft hose may collapse at high speed. A hose that is hard may break. The heater hose should also be checked thoroughly. If hoses are collapsed, cracked, or in any way indicate a soft condition on the inside, replacement should be made. Be sure to tighten hose clamps securely and replace worn ones, if necessary.

The fan belt should be examined for signs of wear and checked for proper tension. Replace the belt if it is badly worn. Clean all obstructions such as bugs, dirt and paper from the front of the radiator. If necessary, have air passages blown clear.

(Continued on page 108)

- All-Vinyl Plastic
- Covers entire fender
- Sponge rubber underlining clings to fender
- Won't slip, won't crawl, won't stain
- Resistant to oil, grease and alcohol
- Wipes clean
- Protects fender from dropped tools, from button and belt buckle scratches

Plus FREE 4-color wall banner...two colorful streamers promoting water pump replacement...water pump chart with application and prices.

PROFIT NOW...PAY LATER

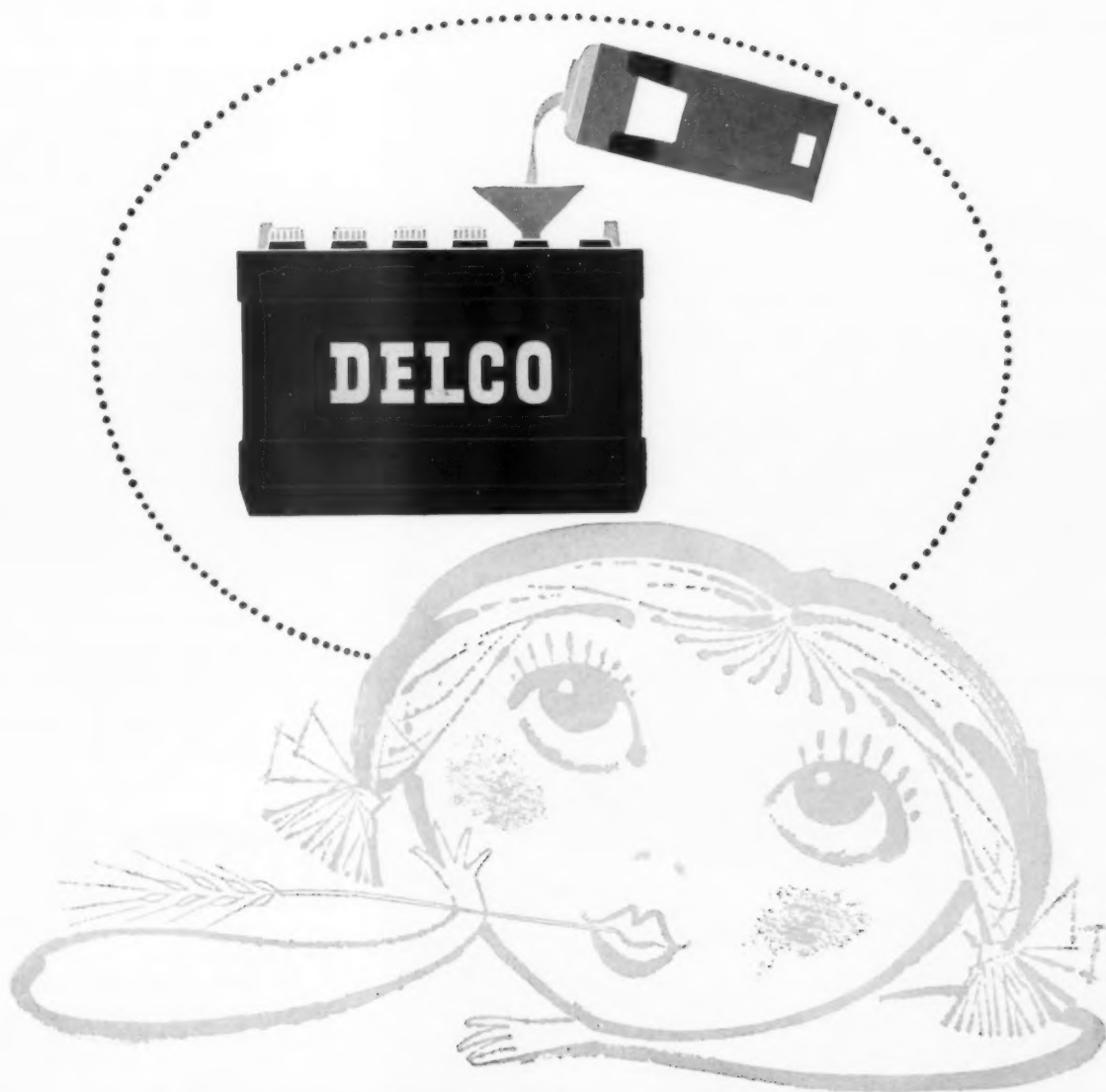
on McQUAY-NORRIS WATER PUMPS

All-New Pre-Tested



Just order any five water pumps covered in our deferred payment plan. You get immediate delivery, you pay later on terms arranged directly with your wholesaler. Don't pass up this great opportunity!

**SEE YOUR McQUAY-NORRIS WHOLESALER FOR FULL DETAILS
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FARMERS' DAUGHTERS *want Delco DC batteries. That's why they're easier to sell.*

Three separate surveys were made by national magazines. All proved that Delco is America's No. 1 battery preference. It's easy to explain—Delco Dry Charge batteries stay factory-fresh, they're priced right, and backed by General Motors warranties that are good all over the United States and Canada. In addition—Delco is supported by the strongest advertising in the industry. On TV, "High Adventure with Lowell Thomas"—on radio, Lowell Thomas Newscast—plus full-page ads in Life, Look, Post, and Reader's Digest. You don't have to be a traveling salesman to sell the farmer's daughter (or anyone else for that matter) on Delco batteries. Just stock 'em—it's easier to *sell* Delco DC, because more people *know* Delco DC.

Quality built by Delco-Remy
distributed nationally through



General Motors leads the way—Starting with Delco Batteries

De Soto Continued from page 55

rear bumper with aluminum recessed between the two bars of the bumper.

The entire rear-end treatment slants forward.

De Soto will have the new four-door hardtop roof with sculptured design and raised rear section for increased leg, knee and head room. Back window glass area has been in-

creased 15 per cent on all De Soto four-door hardtops. A new roof treatment on Adventurer models features black or white textured finish.

Side color sweep treatments for De Soto are new. This includes a gold anodized aluminum insert for the Adventurer. Silver anodized aluminum is available for all other De Soto lines.



WINS YOU THEIR PERMANENT PATRONAGE



Kendall SuperB satisfies every lubrication need of the most advanced passenger car engines. This super-quality SAE 10W-30 motor oil *prevents* pre-ignition and detonation ping — *actually ends* valve lifter sticking. Purely on its performance you build customer loyalty that brings them back again for *all* their needs . . . and an extra avenue of profits for you.

Refined from 100% Bradford Pennsylvania Crude Oil, nature's "miracle molecule" at its best.



KENDALL REFINING COMPANY
Bradford, Penna.

Lubrication Specialists since 1881

The De Soto Firesweep engine is a 361-cubic inch V-8 with 10.1 to 1 compression ratio. Bore and stroke is 4.12 x 3.38 inches. A two-barrel carburetor is standard. Dual exhausts are standard on convertibles and optional on other models.

Engines for De Soto

The engine for the De Soto Firedome has a displacement of 383 cubic inches, compression ratio of 10.1 to 1 and bore and stroke of 4.25 x 3.38 inches. A two-barrel carburetor is standard on this engine. Dual exhausts are standard on convertibles, optional on other models.

The 383-cubic inch De Soto engine is standard on the Fireflite. It has four-barrel carburetor. The compression ratio is 10.1 to 1 and the bore and stroke 4.25 x 3.38. Dual exhausts are standard on convertibles and optional on other Fireflite models.

Power Booster

Continued from page 78

mounted at the side of the radiator bulkhead.

The fans move into operation via a thermostat that functions when the water temperature of the cooling system reaches 185 degrees F. The fans cut out when the temperature drops to 165 degrees F.

The power booster or Everkool unit does put a small load on the generator but kicks off when the car hits moderate speeds.

The manufacturer indicates that a boost of from 8 to 15 horsepower generally results from a new installation. Acceleration is increased; fuel consumption reduced proportionately, and engine vibration minimized.

Editor's note: Conversion time for the unit on a standard car is put at one and one-half hours. Additional inquiries may be directed to Everhot Products Co., 2001 West Carroll Ave., Chicago, Ill.



R. A. Waters, Jr., third in family to head giant Waters organization, stands on storage roof of mammoth, seven-floor dealership.

Robert A. Waters, Jr., president of James F. Waters Inc., San Francisco's largest dealer for 27 years, tells how

"De Soto helped us grow"



"Alertness to the many avenues of opportunity with De Soto has contributed to our growth," says Mr. Waters, shown here with two important members of the Waters team, his brother, T. E. Waters, vice president and general manager, and John A. Clarke, general sales manager.

"My Uncle Jim and De Soto both started in business in 1928," says Mr. Waters. "From a small beginning, with only 13 employees, the business grew fast, and it continued to grow under my father, Robert A. Waters, Sr. We've been the largest dealer in San Francisco for 27 of our 30 years in business—that's how fast we grew. Today, we have 250 employees, a seven-floor building with four acres of floor space and, because our business is built on volume, we seldom have less than 400 new cars in stock.

"One big reason for our growth has been a continuing tradition of enterprise and imagination, an awareness of customer wants and sound business management, begun by my uncle and father. Another big reason, of course, has been the best organization any dealer could ask for.

"But all this is based on one key

factor—the remarkably good, close personal working relationship we've enjoyed with De Soto since 1928. De Soto has always treated us like partners, always ready with advice and assistance when needed.

"They've always supplied us with a well-made, quality product, at a range of prices that lets us sell prospects from Cliff House to the Ferry Bldg. and helped us build a thriving fleet business. Factory advertising, sales promotion and training support has been more than reasonable. This policy of dealer interest, together with customer interest, has been reflected in owner loyalty for the product during the past 30 years.

"We've come a long way since joining De Soto in 1928. But we're looking forward with confidence and alertness to the even greater future potential of our De Soto franchise in the years to come."

IT PAYS TO BE A

DE SOTO DEALER!

(NOW PELLETIZED)

Only **BAR'S LEAKS**

MOST WIDELY USED COOLING SYSTEM PROTECTIVE IN THE WORLD

is FINE enough to
Flow through the
newly designed
Cooling System
and Car Heater
tubes ($23/1000$
to $70/1000$ inch)
in modern
cars.

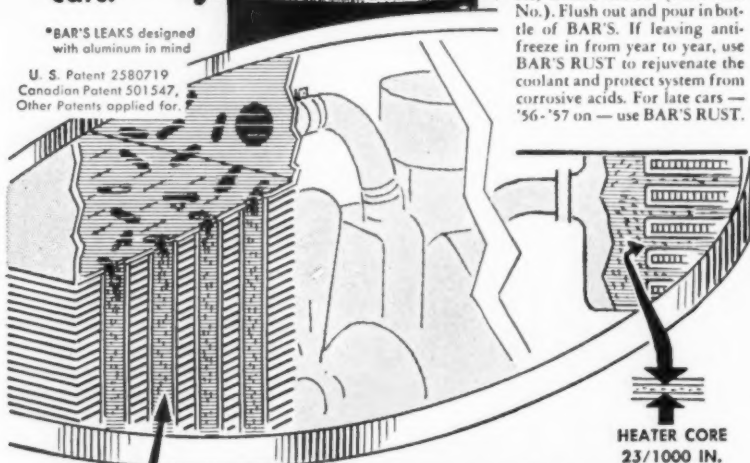
*BAR'S LEAKS designed
with aluminum in mind

U. S. Patent 2580719
Canadian Patent 501547,
Other Patents applied for.



ON ANTI-FREEZE CHANGEVER

● For top engine performance, use BAR'S LEAKS or its affiliate, BAR'S RUST (same Pat. No.). Flush out and pour in bottle of BAR'S. If leaving anti-freeze in from year to year, use BAR'S RUST to rejuvenate the coolant and protect system from corrosive acids. For late cars — '56-'57 on — use BAR'S RUST.



RADIATOR CORE
 $70/1000$ IN.
IN MODERN CARS

HEATER CORE
 $23/1000$ IN.

WARNING!

SERVICE STATIONS — DEALERS

Only BAR'S LEAKS meets the cooling system specifications of every automobile manufacturer as to fineness of ingredients and required protection.

Be on the alert! Many other sealer inhibitors contain coarse, bulky material. They clog the tiny new-car tubes of radiators and car heaters ($23/1000$ to $70/1000$ inch). Fail to circulate. Fail to protect. As a result, aluminum components become pitted, harmful rust and scale develop, and seepage endangers vital metal parts. Remember, if you ruin a car, you're responsible.

Improved BAR'S LEAKS, now pelletized, dissolves to particles $15/1000$ inch and smaller. BAR'S LEAKS circulates freely through the smallest heater and radiator cores. Only BAR'S LEAKS provides the required protection — inhibits rust and scale — seals all leaks in gaskets and porous metal. BAR'S is a **MUST!** Write for literature. Tells how you can qualify as a certified cooling system expert.

Cash in on BAR'S for a lucrative repeat business.
Available through automotive jobbers, service stations, auto goods stores.

LIST PRICE **\$1.00**

BAR'S PRODUCTS SUPPLY, INC.
(Office and Plant) P. O. BOX 146 • HOLLY, MICHIGAN

Shop of the month . . .

Continued from page 39

Formula for Volume

His business formula, in case you're wondering, is not uncommon. It's been employed by many successful men. Briefly, Kosak follows this pattern:

1. treats the public righteously (fair price)
2. works hard
3. uses quality parts
4. stands behind his work

Logically it can be boiled into two elements: hard work and good service.

What about his trade? Where does he solicit this \$175,000 annual business? It began eleven years ago. It was local, a tottering business but growing. It grew handsomely. And, according to Kosak, it's still local and growing! The radius is nearly twenty miles, embracing three nearby communities.

Kosak modernized his station to "keep pace with the times." Above his door might well read these words: "Hard Work, Good Service Modernized This Volume Shop."

New Products

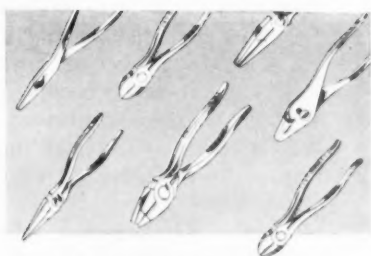
Continued from page 70

Also 6 packs of coupler jaws. Units are wrapped in polyethylene and stapled to the card. The company claims the couplers are leak-proof, will withstand extreme pressure.

338. Supercharger Catalog

Oberhausen Engineering Corporation has issued recently a catalog (No. 58A) depicting many of the most popular demand types of superchargers for modern day car engines. Catalog is liberally illustrated. Also issued is a detailed "Supercharger Instruction Manual." This latter contains over 140 pages devoted to supercharger installation, maintenance and troubleshooting.

Chilton's MOTOR AGE, OCTOBER, 1958



**skilled hands
reach for...**



• Skilled mechanics... thousands of them every year... reach for and buy Channellock pliers. Why? Ask them. They'll tell you they like the positive gripping power... the rugged strength... the precision balance... the all 'round handy "feel" of these quality pliers. And you will too!

**CHAMPION DEPARTMENT TOOL COMPANY
MEADVILLE, PENNSYLVANIA**

**ASK YOUR TOOL SUPPLIER
FOR *genuine*
CHANNELLOCK PLIERS**

Chrysler

Continued from page 52

The classic Chrysler 300E is powered by the 413-cubic inch engine with compression ratio of 10 to 1 and bore and stroke of 4.18 x 3.75. Standard on the high performance 300E engine are two four-barrel carburetors, dual exhaust and special camshaft, air cleaners, distributor, valve springs and dampers.

Style-wise, rear fins sweep upward on the 1959 Chryslers. They form a hood over the tail-lights which are inset into the end of the fins. The rear bumper receives a massive, integrated bar-and-insert treatment.

The car roof enters the field of high fashion in the 1959 Chrysler. A "U" shaped band of stainless steel divides the roof into two areas. The new roof, with its rear section slightly raised or "stepped", provides added head, leg and knee room in the rear seat of all Chrysler four-door hardtops for 1959.

The molding and two-tone treatments lend a "sun-roof" look to the superstructure. The two-tone roof treatment corresponds to the raised rear section of the new roof design for Chrysler four-door hardtops.

Chrysler's new front-end design includes a more massive front bumper. Also dual headlights set low under heavy front fender eyebrows. Grille bars and spacers have specially-designed contours. To reflect light and lend a lustrous jewelled effect.

All body side moldings and color sweeps are new. Sill moldings running between the front and rear wheel openings have been added.

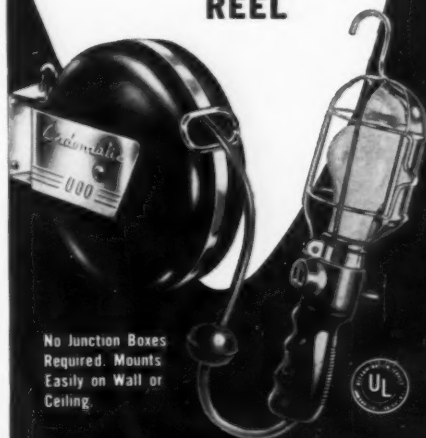
Chrysler interiors feature all new fabrics and seat and door panel designs. The instrument panel is newly styled. More aluminum is used.

IT'S A FACT!

JUST 1

Cordomatic®

**DROP LIGHT
REEL**



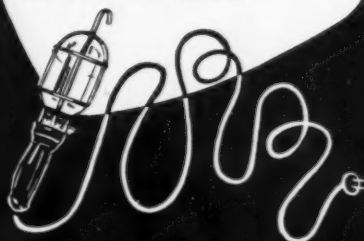
No Junction Boxes
Required. Mounts
Easily on Wall or
Ceiling.



OUTLASTS

12

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**... And Gives You Years of Increased
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Cordomatic not only costs less than any other shop light in the long run, it saves you time and money on every job! Cordomatic reels in and out automatically... can't cause accidents like ordinary drop cords. Once you try a Cordomatic, you'll never go back to dangling, tangling drop cords again!

See your jobber for a demonstration,
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PHILADELPHIA 32, PA.

Chevrolet Continued from page 49

gain, in headroom. Station wagons are now no higher than the four-foot eight-inch sedan. Front tread of the car has been broadened 1.5 inches. The rear tread, .5 inch. Wheelbase is 119 inches and the overall length 210.9 inches.

A new acrylic lacquer has been introduced for the new bodies. Under experiment for

several years, the new acrylic body surfaces will not require polishing for as much as three years in normal climates.

The Impala line has been broadened to include a new 4-door sedan and a 4-door hardtop, in addition to the sport coupe and the convertible.

The Bel Air series is offered in 2- and 4-door sedans.

The Biscayne series, offered in 2- and 4-door sedans and a utility sedan, takes over the lowest price niche formerly occupied by the Delray, now discontinued.

The station wagon series includes 2- and 4-door Brookwoods, a new 4-door Parkwood, a 9-passenger Kingswood and the 4-door Nomad. The third seat in the 9-passenger Kingswood faces the rear and may be folded flush with the floor.

All the station wagons feature a rear window which lowers to the tailgate. Also of interest, when the tailgate is open the cargo area in all station wagons is extended to 10 feet.

The two-passenger Corvette sport car, also refined and improved, rounds out the 1959 Chevrolet passenger car line.

Better visibility characterizes the entire line. Glass now extends higher into roofs and curves farther inward at corners of the body super-structure. Narrow pillars, as well, encourage the feeling of airiness. Typical of increased vision safety is the 4-door sedan.

The windshield alone gets 604.7 square inches of glass more than its last year's counterpart and total glass area is 1189.5 square inches more than in 1958 sedan models. The overall visibility area has been increased up to 50 per cent.

New and Improved **WEAVER**

COUNTERBALANCER

handles the new 14" wheels, too!



No special knowledge is needed to use the Weaver Counterbalancer. The quick, simple operation is easy to grasp. Any mechanic can learn to operate it with but 10 minutes instruction.

Cash in now on the rapidly expanding market for wheel balancing with the Weaver Model WJ-41 Counterbalancer. It balances the wheel while it spins and shows exactly where to put the balance weights, both as to location on rim and proper side of wheel, and shows how much weight to apply. Work can be instantly proved by merely starting machine again.

Close up shows how machine has been designed to allow ample working room for applying weights on the new 14" wheels.



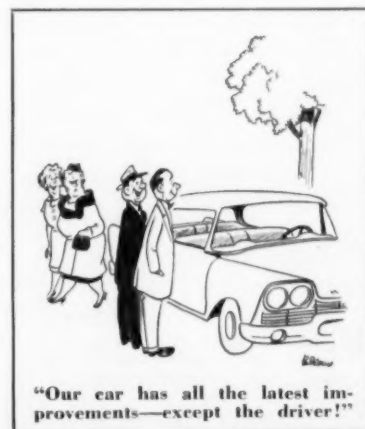
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- 1 Manifold gaskets in all head and full sets — to do the job right!
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- 3 Experienced engineering based on Fel-Pro's years of supplying original equipment gaskets to one of the Big 3 Car Factories!
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Cash in on these
EXTRA VALUES

YOU'RE SURE TO GET IN ALL

FEL-PRO FULL GASKET SETS

There's only one reason for calling for a complete gasket set... and that's to be sure you get every gasket needed to correctly re-gasket the engine! And the one sure way to be certain of getting *fully complete* sets is to call for Fel-Pro Full Gasket Sets. They're the only sets that are always *fully complete*—even down to the manifold gaskets and engine seals. Ends all temptation to violate the money-making, time-saving,

comeback-stopping, rule that says... always renew gaskets, never re-use old gaskets! Do as the man in the picture is doing, ask your Fel-Pro Jobber to prove Fel-Pro's extra completeness... its 6 Extra Values. Ask him to open up a Fel-Pro Full Gasket Set and spread out the contents on the counter. You name the set... your Fel-Pro Jobber's got it and will be glad to show it.

*Serving the sealing needs of cars, trucks, buses, tractors,
small engines and industrial engines... since 1918*

FEL-PRO

FELT PRODUCTS MFG. CO., SKOKIE, ILLINOIS

New Oldsmobile Continued from page 59

rigidity and larger main bearings. It takes advantage of improved foundry techniques that promise better centering of water jacketing.

Both engines are quieter running and much smoother in operation. Some of this improvement is credited to the introduction of a longer, more rigid crankshaft; larger main bearings, increased by 1/4-in. in diameter; larger con rod bearings with a corresponding increase in con rod rigidity. Improved carburetors are found on both engines.

One of the distinctive features being the adoption of a new type of choke mechanism. Termed a split-choke, it is so designed that the choke element release quickly after starting so as to yield greater fuel economy, particularly on short runs and in cold weather operation. The fast-idle, however, is permitted to remain in action until the engine warms up properly.

Cylinder heads, common to both engines, have a thicker deck and better cooling. The intake manifolds have been redesigned for better breathing. Exhaust manifolds have been provided with larger, free-flowing ports. Another feature contributing to better breathing is an increase in intake valve diameter to 1 7/8 in.

Air cleaners are new—with a replaceable filter element on the four-barrel carburetor; and an oil-wetted aluminum foil on the two-barrel carburetor.

Wheelbase on the Dynamic 88 and Super 88 has been upped to 123-in. The 98 remains substantially the same as before. Super 88 and 98 models have larger—9.00 x 14 tires, while the Dynamic 88 has 8.50 x 14 tires.

Brakes have been improved in capacity and durability by provisions for improved air cooling. This is accomplished by the

introduction of an extended flange on brake drums and increasing metal area some 200 per cent. Wheel cylinder size has been increased slightly. Front cylinders are 1 1/4-in. diameter, while rear cylinders now are a full one-inch diameter.

The propeller shaft is new. It is of a two-piece, three bearing design. Dual exhaust system with resonators is optional on all series.

The standard suspension system has been improved through the use of softer action coil springs, a heavier stabilizer bar, and a change in king-pin angle. This results in better control and steering ease. Rear leaf springs have been redesigned for an off-center mounting with a stiff, short section at the front for better control and a longer rear section for a softer ride.



One of the major chassis features is the adoption of a new, rotary valve, inline type power steering gear. This provides better and more positive control with about half the effort on the wheel. Steering gear ratio has been reduced to 17.5 to 1.

Oldsmobile has retained the basic features of its NewMatic

air ride with its four air springs. However, the system has been improved in many details. It now includes sturdier height control valves, well protected from accidental damage. Also introduction of an automatic "spitter" valve on the storage tank to remove water continually. An important optional feature is the Anti-Spin differential, offered on all series.

Cooling System . .

Continued from page 100

Add anti-freeze and run engine. This will circulate coolant throughout the cooling system. Check to see if more water is needed after engine has been warmed. Now check the system carefully for leaks. There may be leaks around hoses, radiator core, hose water pump, petcocks, cylinder head gasket and block. On pressurized cooling systems, use a pressure tester. This will indicate leaks.

Make sure that all leaks are stopped. A chemical sealant will usually stop any small leaks after the antifreeze has been put in.

After the cooling system has been thoroughly checked, it is a good idea to also inspect the battery, points and ignition system. Check the muffler and exhaust system. Be sure that there is no leakage of carbon monoxide fumes.

A routine check of wiper blades is also advisable. See that a non-freezing additive is added to the automatic windshield washer reservoir. Finally, check the car's heater and defroster.

When your customer returns for his car he can now rest assured that his cooling system will not let him down on some cold and traffic-choked highway. Your shop's preventive maintenance service on cooling systems not only pays off in profits but earns the good-will and patronage of your customers.

wouldn't see anywhere outside a show. I always say Dorcas should have been an artist's model. I call her a female John Grimek, and he has the greatest body you ever saw. You've seen pictures of these peasant women, entirely undeveloped, but perfectly proportioned? That's Dorcas. A little excess weight around the hips, but thin women often have that."

Dorcas sat looking at her hands folded in her lap.

"Stand up and show how you can make your waist smaller than your leg," Mr. Hoffman said.

Strong, Silent Type

Dorcas stood up, placed a palm against her stomach, and inhaled. Her abdomen receded, making a hollow over which her short ribs hung like eaves. There was no opportunity to measure for the suggested comparison.

As operator of a bar called Ted's Place, the lady has found it unnecessary to employ a bouncer.

"Dorcas doesn't like to talk about herself," said Mr. Hoffman, who makes it unnecessary, "but when they put the Big Inch pipe line through York they brought an awful tough gang from the Southwest. They killed the bartender in the Union Hotel one night when they were cutting up. Well, one night they came to Dorcas' looking for trouble. She threw one man bodily into the street and the rest ran."

He laughed. "The other night a man she had barred tried to come in. She started around the bar and he took out and ran for his life; funniest thing I ever saw. And then the other night when a fellow took a swing at her—"

"Did he hit you?" Miss Lehman was asked.

"Tapped me on the cheek," she said. "I took off my glasses

and got him outside. Gettin' ready to hit him, but he ran. Oh, well. Don't like to be hitting 'em too much. Means always having to go down to court."

"Do you lose your temper?"
"Once in a while. If they call me names."

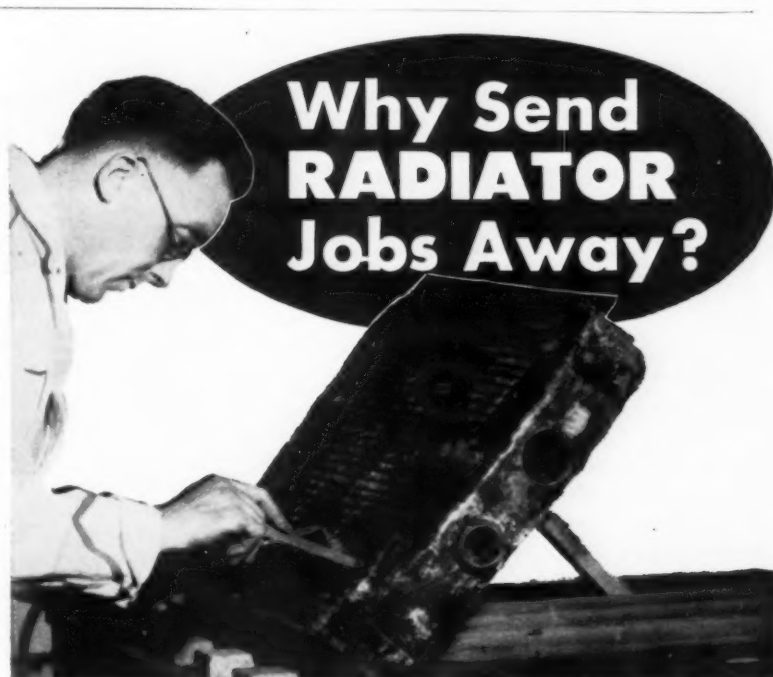
"And to show she is a complete woman," Mr. Hoffman

said, "she has two hundred pairs of shoes, size nine and a half, lots of which she's never worn."

"I just like shoes," the lady said. "Lots of times I just stop in a store and buy four, five pairs without trying 'em on. Just give the size."

"Furthermore," Mr. Hoffman said, "she is a wonderful cook and a marvelous dancer. That's her only dissipation—dancing."

(Continued on page 111)



Add an extra \$8,000-\$12,000-\$15,000 a year SERVICING RADIATORS

"Our Inland radiator department is taking in an average of \$300 a week." Douthitt-Carroll-San Chez Company, Memphis, Tenn. "Grossed \$18,000 the first 9 months."—Harvey C. Jones Co., Reseda, Calif. "Made over \$500 my first month."—Roberts Service, Blacksburg, Va. "Taking in \$50 a day."—Tillie's Service, Fargo, N. D.

High cooling system pressures have forced car owners to have their radiators serviced and repaired regularly.

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ADDRESS _____
CITY _____ ZONE _____ STATE _____
BY _____ TITLE _____

If dealer, make of car sold _____
Are you now operating a radiator dept.? ☐ Yes ☐ No

Chop, Chop That Overhead! Continued from page 41

It is important in this connection to try to compare your figures with businesses of similar financial size in order to avoid distortions.

(3) Item-by-item—Here we put each item of overhead under a microscope regardless of whether or not the percentage trend is unfavorable.

It should be noted that percentages, not dollar amounts, are used in methods one and two in order to reduce the financial data for different periods to a common denominator. This approach makes it much easier to spot the weak points in the overhead armor. The analysis in method three, by its very nature, has to make use of the dollar sign, since it is an absolute technique. Methods one and two, on the other hand, are relative methods and therefore become more meaningful when they compare ratios rather than dollars.

Let us now assume that our probings, whether using methods one, two or three (or a combination), show that item A of our overhead is out of line and needs to be shown its financial place. Is there any general approach we can take or is each item of overhead peculiar unto itself? Yes and yes.

THE general approach involves a critical, logical attitude. Am I handling this item of overhead because it's the traditional way or am I convinced it's really the most efficient way? Have I ever looked on this item as if I were an outsider, thus injecting a fresh outlook? Am I handling this item in the way I do just because my predecessor did it that way? Do I look at this expense item the way I do just because my competitors look at it that way?

Let us deal with specific questions concerning specific over-

head items. It should be clearly understood that a thorough examination of overhead should not be limited to these items exclusively. These are merely representative.

Rent: Can I sublease part of my space? If my rental is higher than comparable rentals why can't I have a chat with the landlord? Can I get a lower rental by signing a longer lease? Am I making the best possible use of my space—can I build shelves, a balcony?

Wages: Do I pay for only necessary overtime work? Can I use part-time employees during peak periods? Am I planning the work schedules so the "wasted" time of my employees is kept to a minimum? Why can't I consolidate the work of John and Henry into Henry alone?

Advertising: Have I checked into all possible advertising media—radio, handbills, local papers, neighborhood shopping publications, etc.—to see which gives me the best "pulling" power for every advertising dollar I spend?

In my direct mail campaigns am I keeping my list up-to-the-minute so I can cut down on wasted time, postage and supplies? Does my advertising copy do these essential things: (a) Attract interest, (b) Hold interest, (c) Convince the prospect, (d) Get the prospect to act? Do I watch the competitors' ads for new slants?

Taxes: When I'm in doubt about any type of tax do I consult my tax advisor? Am I recording my expenses systematically? Am I using the fast methods of depreciation? Am I using proper depreciation rates? Am I properly prorating those expenses which are partly business, partly personal (such as my auto)? Am I charging my customers the proper sales tax?

Insurance: In order to pay my

proper premium on workmen's compensation insurance am I handling these items correctly on my records: (a) Overtime pay, (b) Bonuses and commissions, (c) Travel reimbursements, (d) Different types of salaries, (e) Payments to subcontractors?

Do I compare the rates of at least two companies before I buy insurance?

Interest: If I must borrow am I getting the lowest possible rate of interest?

If you conscientiously follow these rules you will find that your overhead should be reduced and your profits boosted.

Sports Page . . .

Continued from page 109

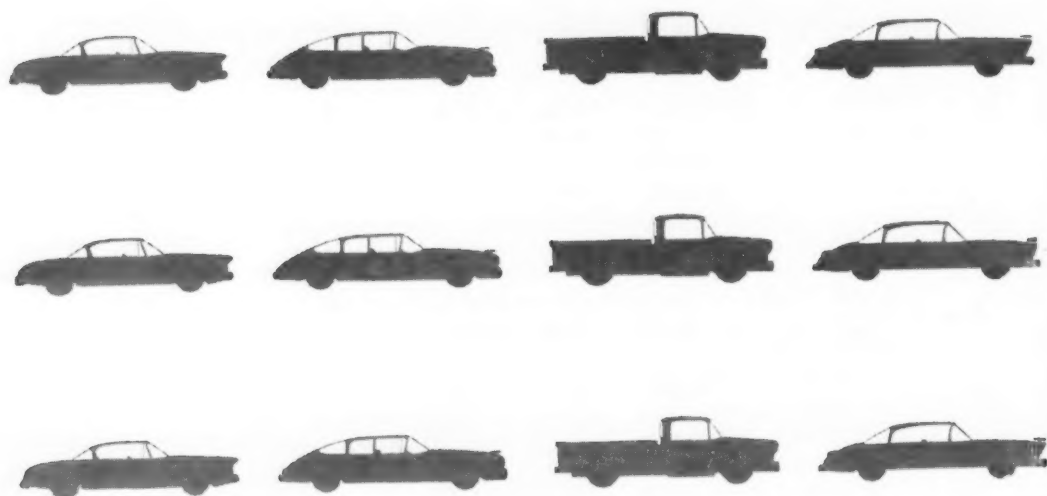
She loves to eat and she's a pretty good beer-drinker."

Miss Lehman said she had no suitors, muscular or puny. "Guess I prefer to be an old maid," she said. Meanwhile Mr. Hoffman was reciting her achievements.

She can break a chain by expanding her chest. She can fit her feet into straps anchored to a wall, place a forty-pound dumbbell on each shoulder and bend backward until her head touches the floor, then straighten up. She can swing seventy-five pounds overhead eighteen times with one hand. She can lift 375 pounds of dead weight. With a bar across her shoulders and a man hanging on each end, she can support 600 pounds. She can do a deep knee-bend with a 216-pound man and a 100-pound barbell on her back. She can do a 1,000-pound leg press—that is, lie on her back and hoist that weight with her feet.

When this recital was complete, the lady was ready to depart. Walking downstairs, she said she liked to visit New York, but hankered for York after about four days. Said she guessed she was just a small-town girl. She smiled good-by and strode off, shoulders squared.

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Financing and management provided by Commercial Leasing Corporation—a Commercial Credit affiliate—with service available through local representatives.

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against the friction plates by means of a spring washer between the plates and the differential case. Since this differential is completely interchangeable with the standard differential, essentially the same rear axle can be used in all Ford cars.

Another noteworthy development marks a major change in

the Ford air ride. This option still retains four air bags, the two at the front functioning as before. At the rear, however, the air bags act in conjunction with leaf springs. The leaf springs, made of wide spring stock, have only three leaves, and are mounted eccentrically with respect to the center bolt to provide a low frequency, vari-

able rate. By anchoring the short, stiff front section of the spring on a fixed hanger, Ford takes full advantage of Hotchkiss drive. The leaf springs are designed to handle boulevard ride conditions, the rear air bags coming into play only on rough or bumpy roads, or to pick up extra load. They also serve a leveling function.

Let us now consider some of the features of the new Ford-O-Matic transmission. Use of aluminum for the one-piece transmission case and bell housing, as well as for the extension, combined with the reduction in the number of parts has resulted in a weight decrease of some 22.8 per cent. Thus the new Ford-O-Matic completely installed with all linkage weighs only about 18 lbs. more than the manual transmission.

The 1959 Ford-O-Matic operates by means of a hydraulic torque converter combined with an automatic planetary gear train. The gear train has two band clutches—the front for low, and the rear for reverse; two servos for operating the front and rear bands; and a multiple disc clutch assembly for direct drive.

The gear ratios for this transmission are as follows: Low, 1.75:1; Drive, 1.00:1; Reverse, 1.50:1. These ratios give the 1959 Ford somewhat better normal start-up performance.

The transmission may be shifted at any speed manually from 2 to 1 by placing the selector lever in low; however because of the 1.75:1 gear ratio in low this is not recommended at extremely high speeds. By shifting the transmission manually to low the transmission acts as an effective down hill brake.

A foot-operated parking brake has been introduced. Control is located on the left side of the steering column. It has an easy-to-operate, tip-down handle for brake release, located on the left under side of the dash.

Two New Heavy-Duty BRAKE FLUIDS

IN ATTRACTIVE DISPLAY CARTONS

do a super selling job for you!

super 703
HEAVY-DUTY
BRAKE FLUID
EXCEEDS SAE 70R1 & 70R3
Specifications



super 703
HEAVY-DUTY
BRAKE FLUID
EXCEEDS 400° BOILING POINT
UNDER OPERATING CONDITIONS

EIS Super 703 is formulated for SUPER HEAVY-DUTY use in cars, trucks, buses and taxi fleets. It has a normal operating range of over 410° F. to a minus 60° F.!

super 500
HEAVY-DUTY
BRAKE FLUID
EXCEEDS SAE 70R1
Specifications



super 500
HEAVY-DUTY
BRAKE FLUID
HIGH BOILING POINT

EIS Super 500 is formulated for normal heavy duty service. It has an operating range up to 345° F. to a minus 60° F. This improved brake fluid replaces EIS Super 50.

Designed for Over-the-Counter Sales and Profits!

Both of these new EIS Super BRAKE FLUIDS have excellent lubrication qualities. They are non-corrosive—they preserve the life of both natural and synthetic rubber and are miscible with other brake fluids of equal quality.

ASK YOUR DISTRIBUTOR FOR THE NEW EIS HYDRAULIC BRAKE PARTS CATALOG NO. 26H
EIS AUTOMOTIVE CORP., MIDDLETOWN, CONN.

1959 Cadillac Continued from page 61

ever installed on a Cadillac. There are over 450 square inches of additional glass area in the 1959 Sixty-Two Sedan compared with the same 1958 model. The windshield is compound curved and extends well into the roof.

The rear quarter panel has convex sculptured lines and a newly styled fin. The tail, stop and turn indicating lights are housed in two fairings horizontally astride the fin.

The over-all length of all models, excluding the Seventy-Five is 225 inches. The length of the Seventy-Five is 244.8 inches. Wheelbase, excluding the Seventy-Five is 130 inches. The Seventy-Five has a 149.8 inch wheelbase.

As compared to 1958, the Sixty-Two Sedan, Sedan de Ville, and the Sixty Special are 2.9 inches lower. The four-window sedans are 5.5 inches lower and the Seventy-Five is 2.3 inches lower. The Sixty-Two series coupe is 3.7 inches lower while the convertible is lowered 4.5 inches. The Seville is 3.2 inches lower and the Biaritz is 4.0 inches lower.

Cadillac's new engines feature a displacement of 390 cubic inches. The standard engine with a four-barrel carburetor has a horse-power rating of 325. The "Q" engine has 345 horse-power with three-dual carburetors.

The bore and stroke are 4 x 3.875 inches, with the stroke increased one-fourth of an inch. Compression ratio is 10.5:1 as compared to 10.25:1 last year.

The torque on the standard engine is 430 foot pounds at 3100 rpm and 435 at 3400 rpm for the "Q" engine. The automatic choke heat source has been moved into the exhaust section of the intake manifold for quicker heat response. An automatic temperature compensator is added for improved idle opera-

tion. The intake manifold has been redesigned with larger passages and the exhaust valves have been streamlined.

An axle ratio of 2.94:1 is standard with a new gear tooth design. An optional axle ratio of 3.21:1 is available. It is standard on the Eldorado series and all air conditioned cars.

The power steering system features a new rotary valve for improved response and a new pump with a large capacity. The steering ratio is now 18.9 to 1.

To improve the ride, a new shock absorber had been developed. It is a captive Freon-12 shock absorber which keeps the oil reaction in the shock absorber constant. The result: improved wheel control and ride characteristics.

PROVED 125,000,000 TIMES!



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BUILD SERVICE REPUTATIONS!

Automobile service outlets of all kinds proved long ago that genuine, factory-new Bendix® Starter Drives can be one of their most powerful goodwill builders. First in its field for over fifty years, the Bendix drive provides dependable, high-quality performance that makes customers happy—and keeps them that way. Get enough happy customers, and you've got yourself a good service reputation. And you know what that can mean—both in new and in repeat business. Be sure to order genuine, factory-new Bendix drives and parts from your distributor. *REG. U. S. PAT. OFF.

Bendix-Elmira
Eclipse Machine Division
Elmira, New York



1959 Plymouth Continued from page 57

Turning to body styling again, it will be noted that new rear deck lid has been changed. Lid now slopes gracefully to the rear end.

Adding to the luxury car look of the 1959 Plymouth is its sport deck wheel cover, first introduced on the Imperial. The sport deck wheel cover is standard on Sport Fury models; optional on

all other Plymouths except station wagons. Chrome-accented taillights are positioned horizontally. Their new location adds to the appearance of width and lowness.

More massive front and rear bumpers have been newly-designed for 1959. The new front grille is aluminum. In a bold lattice-work pattern. Divid-

ing the grille in the center is a gold-anodized aluminum medallion on a black field.

Protective rubber guards for bumpers are available as optional equipment on all models.

A new optional equipment steering wheel is fashioned of translucent plastic with a padded vinyl spoke and full circle horn ring. The Plymouth instrument panel has been restyled for 1959.

The Fury V-80 is the standard Plymouth V-8. Displacement is 318 cu. inches. Compression ratio is 9 to 1. A two barrel carburetor is standard. A Super-Pak with four-barrel carburetor, dual exhaust, and special camshaft is optional. Exception: Sport Fury model, where it is standard equipment.

Torsion-Aire is standard on all 1959 Plymouths as well as on all Chrysler Corporation cars.

Offered as extra-cost optional equipment on all models are rear air leveling units to provide automatic self-leveling for cars that will be carrying extra-heavy loads in their rear compartments.

Major elements of the system are torsion bars. Chrysler Corp. engineers say the bars make more efficient "springing" use of steel than the coils they replaced; rubber isolation of all parts between wheels and frame to deaden shock and vibration; ball joints for turning ease; a completely unique type of highly unsymmetrical rear spring; cushioning low-pressure tires that kill a large part of road noise and vibration at its source; and sturdy frame designs.

Torsion-Aire's features have been further improved for 1959. By a new cam-action adjustment for precise setting of caster and camber. Also by suspension ball joint designs which provide better lubrication and self-sealing characteristics.

Adjustment of caster and camber is simplified by the cam

Continued on page 119

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Write for the Herbrand family folder, describing tools, drills, equipment.

Herbrand DIVISION

THE BINGHAM-HERBRAND CORPORATION
FREMONT, OHIO

New Pontiac Continued from page 58

Fuel economy will be stressed for those who want it. The V-8 with 8.6 to 1 compression ratio with a 2-barrel carburetor, in combination with an axle ratio of 2.87 to 1 will be offered. Car owners who want economy combined with fleet performance can specify this engine in combination with Hydra-Matic drive.

Three series with 14 models are offered in 1959. The top series is the Bonneville mounted on a 124-in. wheelbase chassis. The Safari station wagon is on a 122-in. wheelbase. The body styles in the Bonneville series include: the convertible; 2-dr. hardtop; sport coupe; 4-dr. Vista hardtop; and 4-dr. Safari station wagon.

The Star Chief features three models on a 124-in. wheelbase: 4-dr. Vista hardtop; 4-dr. sedan; and 2-dr. sport sedan.

A new Catalina series, mounted on 122-in. wheelbase, offers nine models: convertible coupe; 2-dr. hardtop sport coupe; 4-dr. Vista hardtop; 2-dr. sport sedan; 4-dr. sedan; and two- and three-seat, 4-dr. Safari station wagons.

The 1959 V-8 has the same bore— $4\frac{1}{16}$ in.—but has a new shell-molded cast crankshaft of pearlitic malleable providing a stroke of $3\frac{3}{4}$ -in. The economy version of this engine, with 8.6 to 1 compression ratio, has a specially designed carburetor, intake manifold and camshaft, runs on regular fuel. Crankshaft main bearing journals have been increased to three-inch diameter to improve smoothness and durability. They employ steel-backed Durex bearings with a babbit overlay.

The clutch, pistons, exhaust system, and the 4-barrel carburetor, standard on all Bonneville models have been improved.

The tubular center X-frame has been redesigned for greater strength and rigidity. The ride

has been improved by suspending the lower control arm in rubber; by increasing the angularity of front control arms with respect to each other to give greater anti-dive effect; by the use of larger front coil springs having lower spring rates; and by modifications in shock absorber valving to provide a softer ride.

Air ride suspension, available in all models, is substantially unchanged. The non-slip differential also is offered as extra cost equipment. Now lets take a look at the Hydra-Matic.

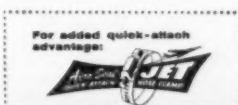
Hydra-Matic transmission, available in all models, has been modified to provide smoother shifts, increased reverse capacity, and greater durability. These improvements have been effected by means of a new rear clutch plate material; and a new

Continued on page 119



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Calendar of Coming Events

General

Oct. 12-18—Oil Progress Week.
Oct. 15-16—Virginia-Carolinas Automotive Wholesalers Assn., Fall meeting, Robert E. Lee Hotel, Winston-Salem, N. C.
Oct. 15-18—Automotive Wholesalers of Texas convention, Moody Civic Center, Galveston, Texas.
Oct. 20-22—1958 SAE National Transportation Meeting, Lord Baltimore Hotel, Baltimore, Maryland.
Oct. 20-24—46th annual National Safety Congress and Exposition, Chicago.
Oct. 24-25—California Automotive Wholesalers Assn. convention, Monterey, Cal.
Oct. 24-Nov. 2—Small Car and Aircraft Exhibition, International Amphitheatre, Chicago.
Oct. 27-28-29—New Jersey Automotive Trade Association, Chalfont-Haddon Hall—Atlantic City.
Nov. 3-6—Automotive Warehouse Distributors Assn. convention and manufacturers-distributors conference, Muehlebach Hotel, Kansas City, Mo.
Nov. 10-13—American Petroleum Institute 38th Meeting, Conrad Hilton, Palmer House and Congress hotels, Chicago.
Nov. 12—Connecticut Automotive Trade Assn., Hotel Statler, Hartford.
Nov. 14-16—Florida Automotive Wholesalers Assn. convention, Hollywood, Fla.
Nov. 22-29 excluding Sunday, Nov. 23 The Automobile Show, Grand Exhibition Hall of the Trade and Convention Center at 34th Street and Convention Ave., Philadelphia, Pa.
Jan. 17-25—1959 Chicago Automobile Show, International Amphitheatre.
Feb. 2-4—Automotive Accessories Manufacturers of America exposition, New York Coliseum, New York City.
Feb. 15—Automotive Booster Clubs International executive counsel meeting, Conrad Hilton Hotel, Chicago.
Feb. 15-16—Automotive Affiliated Representatives officers meeting, Pick-Congress Hotel, Chicago.
Feb. 15-17—Motor and Equipment Wholesalers Assn. National Convention, Conrad Hilton Hotel, Chicago, Ill.
Feb. 16—Automotive Booster Clubs International board of governors meeting, Conrad Hilton Hotel, Chicago.
Feb. 17—Automotive Affiliated Representatives board of directors and membership meeting, Pick-Congress Hotel, Chicago.
Feb. 18—Automotive Booster Clubs International banquet, Conrad Hilton Hotel, Chicago.
Feb. 18-21—International Automotive Service Industries Show, Navy Pier, Chicago.
Feb. 26-27—American Petroleum Institute, Div. of Marketing, Lubrication Committee meeting, Sheraton-Cadillac Hotel, Detroit.
Feb. 27-March 8—1959 World Wide Auto Show, Miami Beach Exhibition Hall, Miami Beach, Florida.
March 12-15—Pacific Automotive Show, San Francisco Civic Auditorium, San Francisco.
May 3-8—Top Management Institute, Motor and Equipment Wholesalers

Assn. Allerton House, University of Illinois, Monticello, Ill.

May 4-6—American Petroleum Institute, Div. of Marketing, Lubrication Committee meeting, San Marcos Hotel, Chandler, Ariz.

May 17-20—Automotive Engine Rebuilders Assn. convention, Royal York Hotel, Toronto, Ontario.

May 27-29—American Petroleum Institute, Div. of Marketing, midyear meeting, The Savery, Des Moines.

Dealers Convention

Oct. 19-21—Florida Automobile Dealers Assn., Eden Roc Hotel, Miami Beach.

Nov. 8-10—Texas Independent Automobile Dealers Assn., Texas Hotel, Fort Worth.

Nov. 16-18—Mississippi Automobile Dealers Assn., Buena Vista Hotel, Biloxi.

Dec. 3—Utah Automobile Dealers Assn., Newhouse Hotel, Salt Lake City.
Dec. 9—Milwaukee County Automobile Dealers Assn., Milwaukee Athletic Club, Milwaukee.

Jan. 31-Feb. 4—National Automobile Dealers Assn., Chicago.

Texas Garagemen Hold Convention

Approximately 250 delegates to the Independent Garagemen's Association of Texas convention on September 5-7 ratified a set of standards for state apprentice training. Site of the convention was the Lincoln Hotel in Odessa.

The move to establish a state apprentice program was three years in the making. It came just one year short of the scheduled graduation of two groups of apprentices in San Antonio and Waco. It received unanimous approval from the 18 chapters and 10 districts present.

A move to set up the ground rules for licensing both shops and mechanics through legislation came in for considerable discussion. It was finally passed by a single chapter vote. Detailed plans for securing passage of this piece of legislation were not outlined by the committee.

Pontiac Continued from page 117

reverse clutch with both internal and external contact surfaces on the cone.

The new rotary valve, inline power steering gear is offered this year. Its chief features include, compactness and reduced steering effort while adding to the feel of the road.

Brakes Are Improved

The brakes have been improved by adding about 10 per cent more lining area, and 39 per cent more drum weight with cooling flanges on front drums.

Option power brakes have also been improved. The new unit is more compact. Has better performance and reduced operating noises and friction. An improve-

ment in the linkage system produces a lighter feel with more positive control.

Both heater and air conditioning system have been improved. A rear seat heating duct is a feature of the new heater-de-froster unit. Pushbutton controls to the right of the steering column actuate the dash-mounted heater. The air conditioning system is new. It incorporates a larger condenser and evaporator,

new outlets and increased air flow. Vacuum-operated temperature and blower fan controls are accessible to the left of the steering column.

Additional Accessories

Among additional accessories available as optional are: an electric windshield wiper and washer system; dual exhaust; a new outside mirror; a new rear speaker system; and a new power antenna mounted on the right rear fender at an angle of 27-degrees.

Plymouth

Continued from page 116

arrangement for setting both caster and camber.

In developing the air units, the objective of Chrysler engineers was to incorporate automatic car leveling under heavy load conditions. And yet still retain the characteristics of the Torsion-Aire system.

Through use of rear air units as a supplement to the existing rear springs, Chrysler engineers report they have eliminated the possibility of a car being immobilized by loss of air from the system.

Components of the air system include: 1) a high-pressure air compressor located in the engine compartment; 2) a storage tank at the front of the frame; 3) a low-pressure air reservoir above the rear axle; 4) rugged rubber and nylon air chambers; 5) a height control valve.

Compressed air in the reservoir and the attached air containers act to cushion the shock of bumps.

Introducing PURITAN Heavy Duty Brake Fluid



New Puritan Heavy Duty Brake Fluid is the economical answer to today's high temperature requirements. Contains Puritan's traditional quality ingredients that assure trouble-free, heavy duty performance. Order Puritan Heavy Duty Brake Fluid through your NAPA jobber today!



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Still the top-quality, premium heavy-duty brake fluid. Meets or exceeds SAE Specifications 70R3 and 70R1.

Meets or exceeds SAE Specification 70R1

HEAT RESISTANCE exceeds SAE Specification 70R1

RUST RESISTANCE exceeds SAE Specification 70R1

VISCOSITY exceeds SAE Specification 70R1

STABILITY exceeds SAE Specification 70R1

COMPATIBILITY meets SAE Specification 70R1

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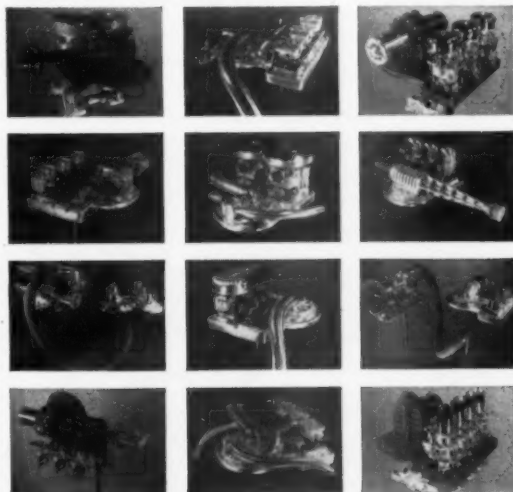
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THE LAST



LAFF



"Your ad said you wanted a fast worker—and here I am!"

The policeman approached the car, occupied by two elderly ladies, parked right in the middle of a "No Parking" zone and assuming his sternest expression said: "See here, ladies, do you want a ticket?"

After hastily conferring with her companion, the driver smiled sweetly and answered, "No thank you, young man. We never win anything."

Bachelor's advice on cocktail party behavior: "Always stand in front of the biggest mirror in the room. Every woman in the place will see you before she leaves."

"Mamma," asked little Mary, "if I get married, will I have a husband like Daddy?"

"Yes dear."

"Mamma, it sure is a hard world for us women, isn't it?"



"Mother! He got it! Daddy got the new sports car!"

"Your wife and I are in love. Since we're both sporting men, how about a game of gin rummy for her?"

"Okay, but let's play for a penny-a-point on the side to make it interesting."

As the conductor called out the various names of the city streets, the couple from back in the hills became more and more uneasy. The conductor called "Maple," then "Adams," then "Jones."

The hillbilly, very fidgety, finally turned to his wife and said: "Isn't it time to get off?"

"Don't show your ignorance, Matthew," she said. "Wait 'til your name's called."

"Do you think your daddy will be laid up very long with his injured leg?"

"Yes, I think so, compensation's set in."

Women come in four general specifications: Thin, medium, plump, and "Get a load of her!"

An alarmed motorist stopped hurriedly when he saw a young man standing beside an overturned small sports car.

"Anybody hurt in the accident?" he inquired?

"There wasn't any accident," replied the young man calmly. "I'm changing a tire."

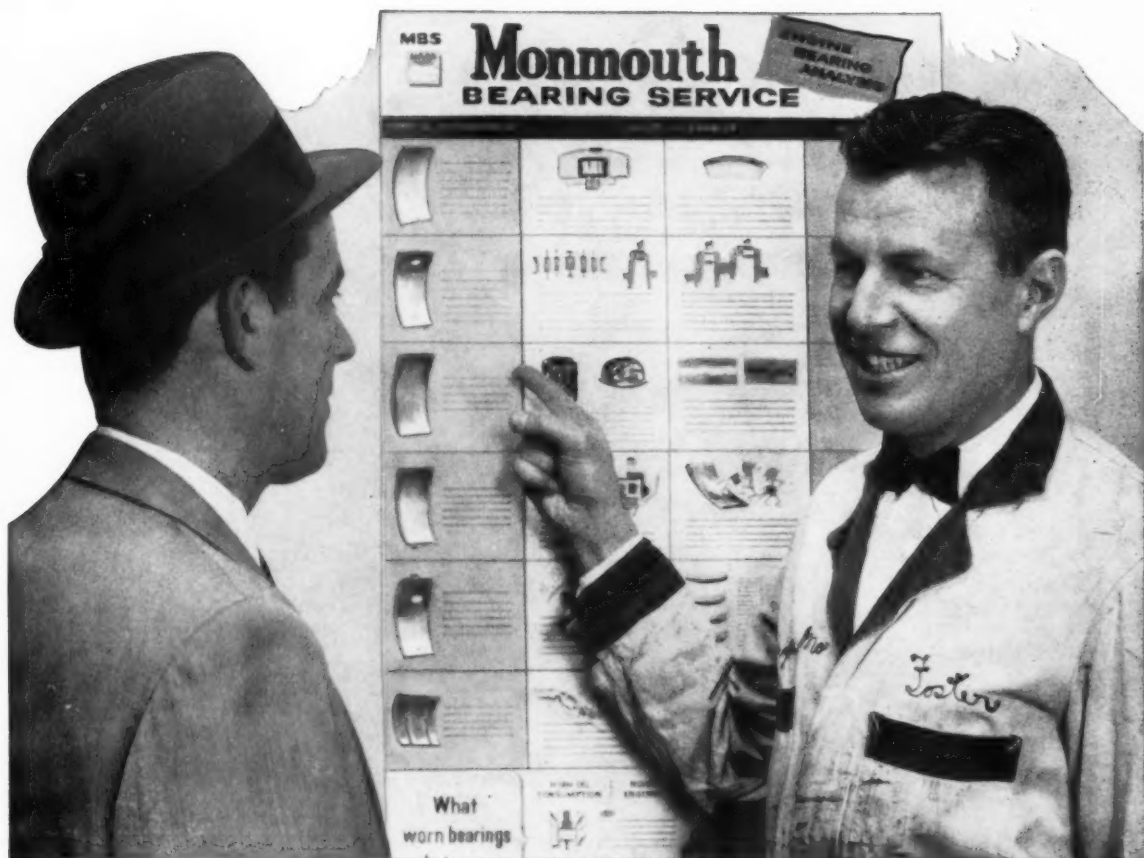
"Whiskey once saved my life."
"Snake bite?"
"Snake bite nothin'. I was diggin' a well once and come up for a drink, and while I was gettin' it, the well caved in."



"So don't listen! Anything I have to say is strictly between me and this wrench!"



"Lady, will you please stop demonstrating how weak the shock absorbers are till I get through checking the muffler?"



Give your customers **FACTS...NOT FICTION!**

FIND IT!

The clue is in the way you trouble-shoot. Customers want a ring of authority when you diagnose motor trouble. Clevite helps you find it... and find it fast. The answer is on the new Wall Chart.

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When it's bearing wear, the solution is simple—Monmouth Engine Bearings. Their superior surface behavior, fatigue strength and corrosion resistance assure the finished, satisfactory jobs you and your customers need.

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You can... and you have this new Monmouth Wall Chart to help justify your own good workmanship and judgment. It tells you the facts... everything you need to *know* and *apply*... cause of bearing failure, effect and remedy. It's accurate... authentic... convincing and conclusive... truly a great sales and confidence builder.

Get in NOW—by getting in touch with your nearest N.A.P.A. jobber and asking him about Monmouth quality bearings.

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Modernized to meet modern driving conditions.



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Brake Lining and Bonded Shoes



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